CIO/NII
Enabling Net-Centric Operations

DoD-CIO/ASD-NII Enterprise Architecture & Standards Directorate

Presentation to DAU IRM Class Level III 28 July 2008

Walt Okon
Chief Architect, DoD Information Sharing
walt.okon@osd.mil
703-607-0502

Agenda

- Introduction/Overview
- DoDAF 2.0 Development
- Architecture Federation
- DoD Standards (DISR/ICISR/FISR)
- DoD Architecture Training
- DoD Technical Direction
- DoD Information Sharing Environment
- **DoD Enterprise Architecture Conference**
- Questions/Wrap-Up

CIO/NII
Enabling Net-Centric Operations

CIO/NII
Enabling Net-Centric Operations

DoDAF 2.0 Development

The Vision and the Effort

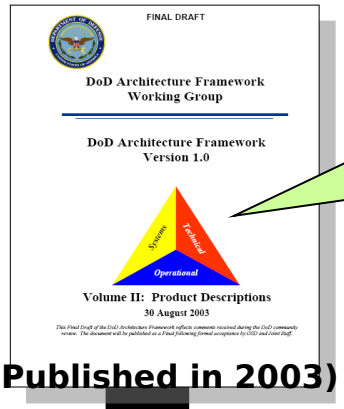
Key Policies Requiring DoDAF

Joint Staff

- CJCSI 3170.01F, 1 MAY 2007, “JOINT CAPABILITIES INTEGRATION AND DEVELOPMENT SYSTEM”
- CJCSM 3170.01C, 1 MAY 2007, “OPERATION OF THE JOINT CAPABILITIES INTEGRATION AND DEVELOPMENT SYSTEM”
- CJCSI 6212.01D, 8 MAR 2006, “INTEROPERABILITY AND SUPPORTABILITY OF INFORMATION TECHNOLOGY AND NATIONAL SECURITY SYSTEMS”

CIO/NII
Enabling Net-Centric Operations

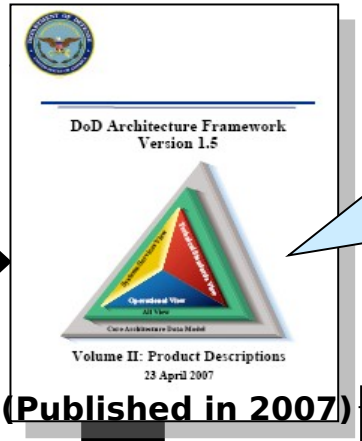
DoDAF Evolution To Support "Fit For Purpose" Architecture



(Published in 2003)

DoDAF 1.0

- CADM Separate
- Baseline For DoDAF 1.5
- Removed Essential & Supporting Designations
- Expanded audience to all of DoD



(Published in 2007)

DoDAF 1.5

- **Addresses Net-Centricity**
- Volume III is CADM & Architecture Data Strategy
- **Addresses Architecture Federation**
- Baseline for DoDAF 2.0
- **Shifted away from DoDAF mandating a set of p**

DoDAF

2.0

(To Be Published)
(Late 2008)

DoDAF 2.0

- **Cover Enterprise and Program Architecture**
- **Emphasize Data versus Products**
- **Tailored Presentation**
- **AV-1 to capture federation metadata**
- **Quality Support to Decision Processes**
- **FEA & Allied/Coalition Support**
- **Journal**

CIO/NII
Enabling Net-Centric Operations

Net-Centric Concepts addressed in DoDAF 1.5

The following Net-Centric Concepts were presented and discussed to be included in DoDAF 1.5

1. **Populate the Net-Centric Environment**
   - Represent what information and capabilities are being made available (as services) to the NCE so they can be leveraged by others.
2. **Utilize the Net-Centric Environment**
   - Represent what information and capabilities provided on the GIG will be available to service consumers through service discovery and leveraged across the NCE.
3. **Support the Unanticipated user**
   - Represents that 1) capabilities can scale to support both human and system unanticipated users, and 2) the posting of information, data, applications and services to the NCE occur as soon as possible to enable multiple use.
4. **Leverage COIs to promote Jointness**
   - Represents the utilization of COI specific interface specifications, taxonomies, and common vocabulary to support interoperability in the NCE.
5. **Support Shared Infrastructure**
   - Represents that the shared physical and services infrastructure (the EIE) is identified and leveraged in the NCE.

Volume II Net-Centric Example

"5.4.3 Net-Centric Guidance for SV-4b

Augmented Product Purpose. In a net-centric architecture, the SV-4b is used to document service functionality that is exposed to the NCE, their r… families, and their service specifications. … SV counter… …ation between OV-5 or business-process hierarch… …b, it need not be a one-to-one mapping, hence, the nee… …s Traceability Matrix (SV-5c), which provides that ma…

Net-Centric Product Description. The SV-4a trac… …d the flow of system data between functions and corre… …e NCE, th… …services are orchestrated together to deliver f… …In industry, this is often referred to as c… …s… …ation and capabilities in the NCE and can be c… …groupings or families to assist in understanding how a s… …domain or a system capability. The SV-4b also c… …ces and may represent external services, systems, or hu… …Multiple SV-4b products can be utilized to show deeper levels of detail as system nodes are decomposed i… …se… into services that consist of specific operations and d… In the NCE, se… …ent desc… service capabil… …be cons… The SV-4b should … …about … the **service speci…*tion*** sh… …or will be provided to …*cation*** consistent manne… …d be used … each service. Regardless of the precise SST, the necessary minimum subset of information from the SST for each service must be captured in the SV-4b:

- ***Interface Model Category*** includes information of the service specification that identifies the service … enables service consumers to discover the service and determine the service's suitabil… their needs. It also provides a… …tance in… …les ***se…*** …wing types of attri…
- ***Servi…*** …tive name for the servic… as it ap…

Document service functionality that is exposed to the NCE
Capture and depict how services are orchestrated together to deliver functionality
Document data flows between services
Services are a key means to share information and capabilities in the NCE
Service Specification
s
Service Specification Template

Three Integrated Volumes

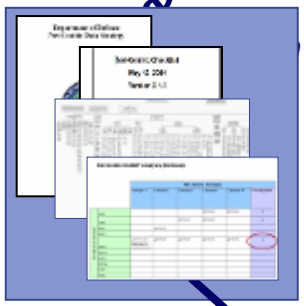
Net-Centricity Sources &

Decision Support Processes

Survey, SME interviews, Feedback

Workshop Inputs

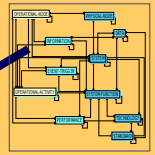
State of DOD Architecting

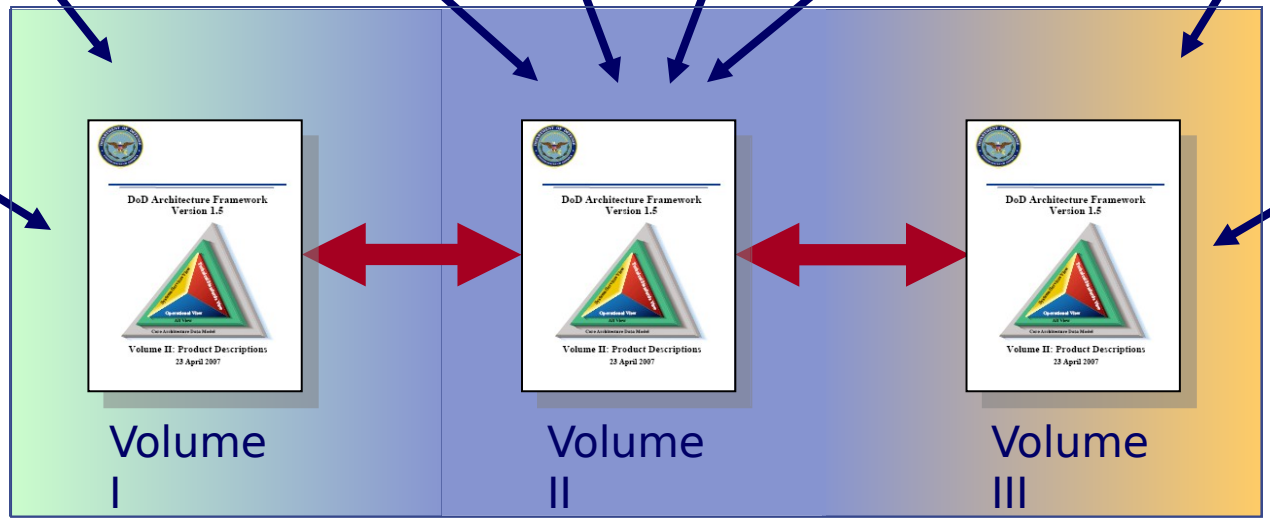


Architecture Data Strategy

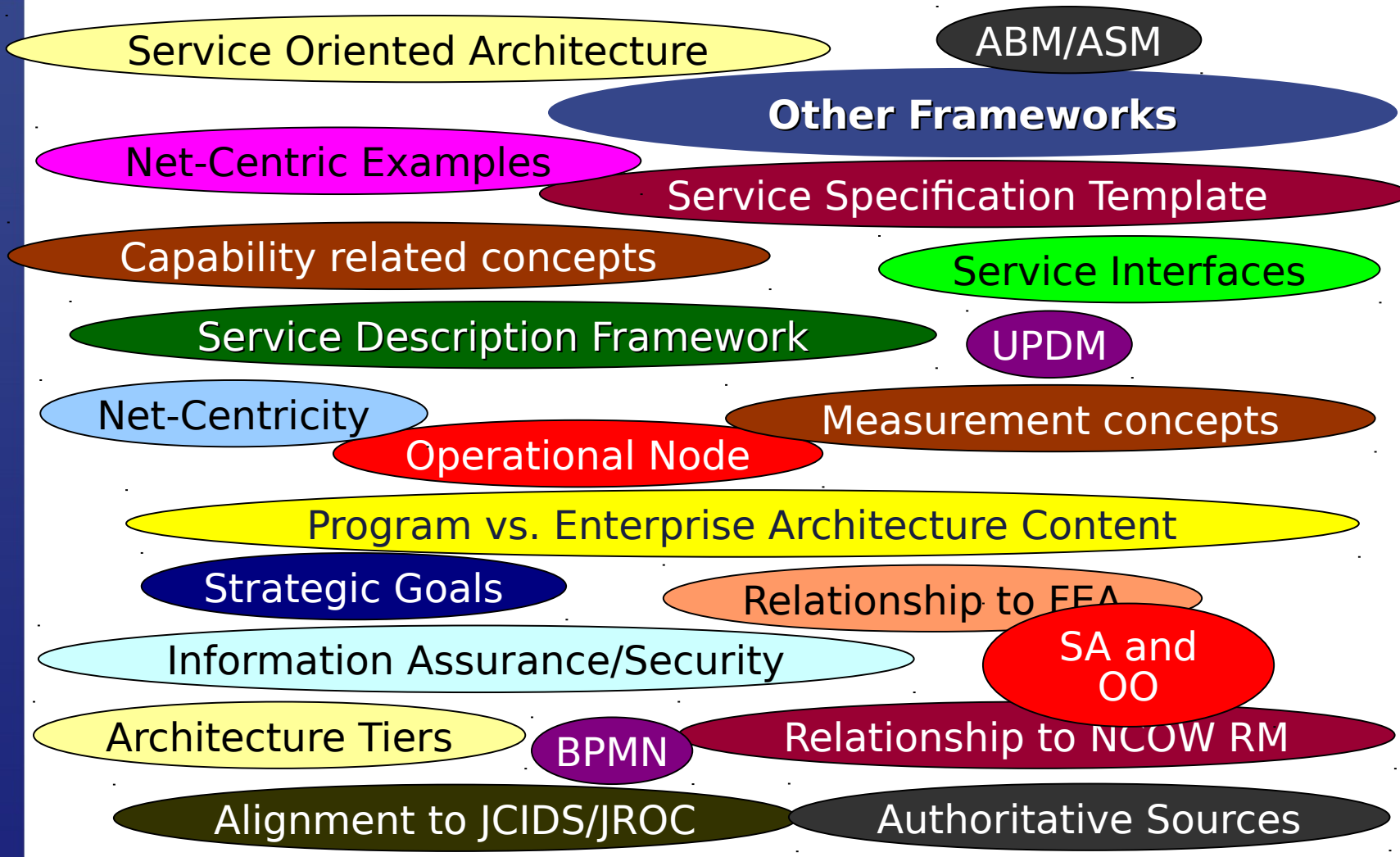
Federation Strategy

CADM 1.5





DoDAF v1.5 Stakeholder Feedback



Vision Statement for the DoDAF v2.0

To enable the development of architectures that are meaningful, useful, and relevant to the DoD Requirements, Planning, Budgeting, Systems Engineering, and Acquisition decision processes.

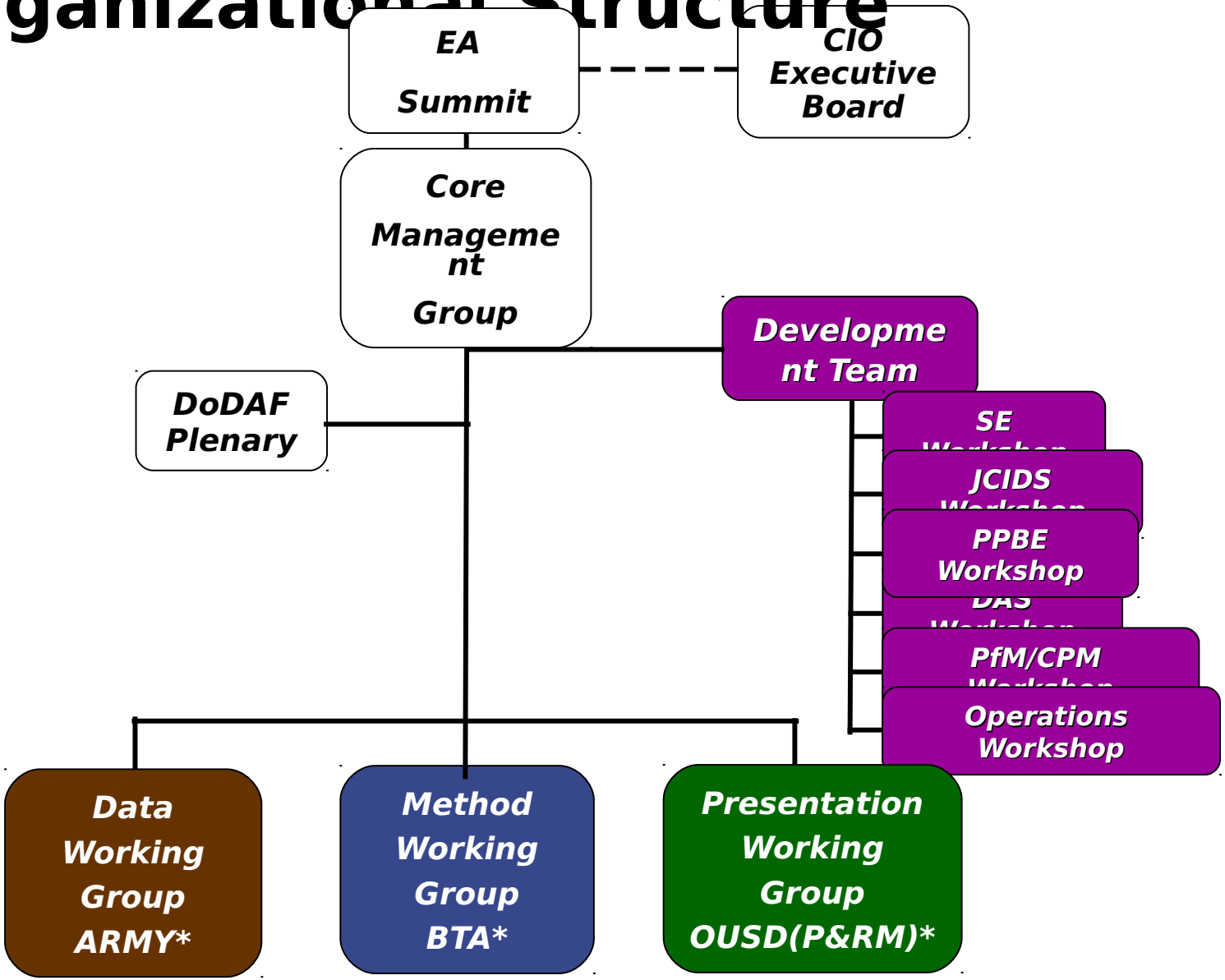
CIO/NII
Enabling Net-Centric Operations

Definition for the DoD Architecture Framework

The DoD Architecture Framework is the structure for organizing architecture concepts, principles, assumptions, and terminology about operations and technology into meaningful patterns to satisfy specific DoD purposes.

CIO/NII Enabling Net-Centric Operations

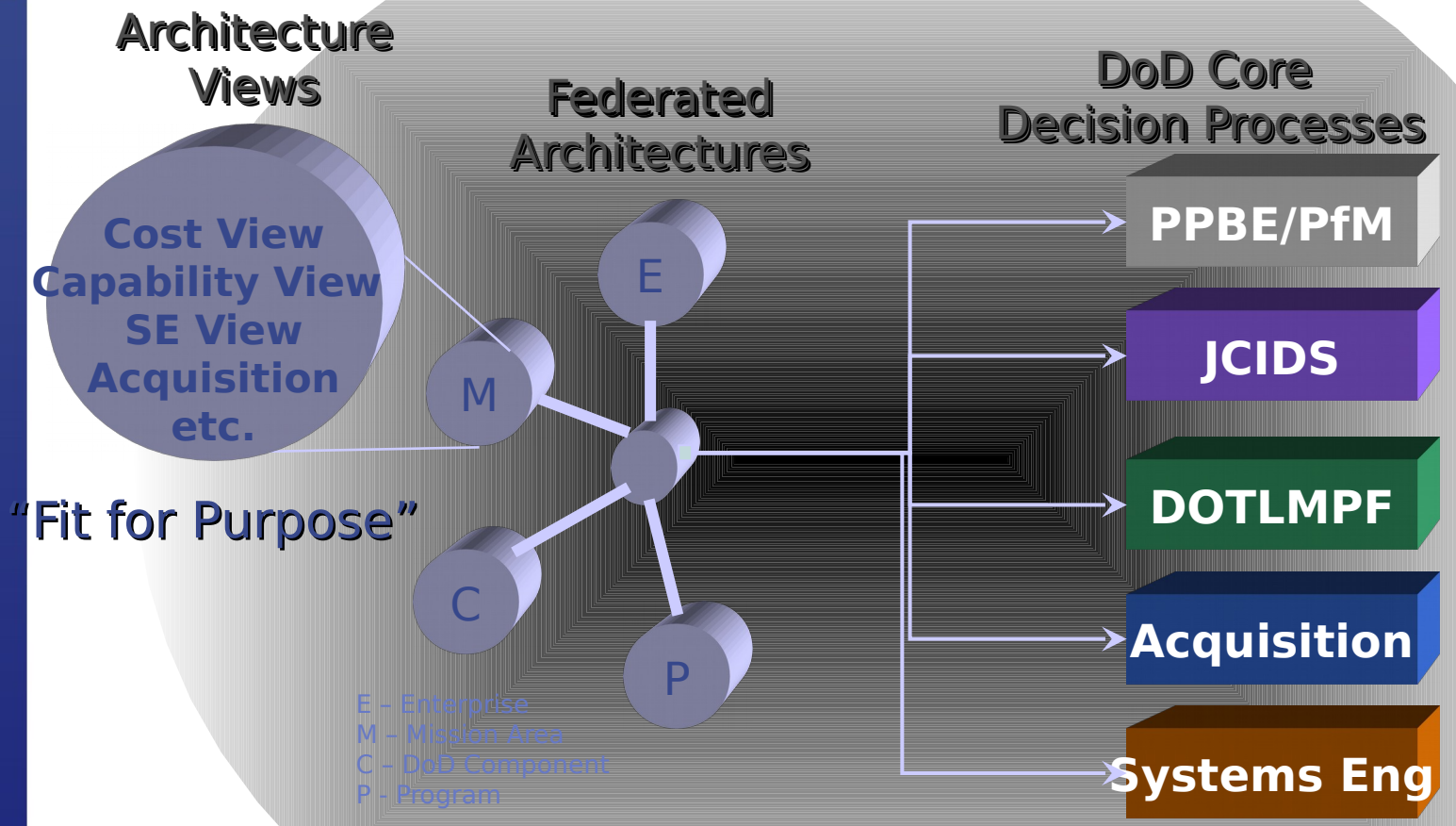
DoDAF 2.0 Development Organizational Structure



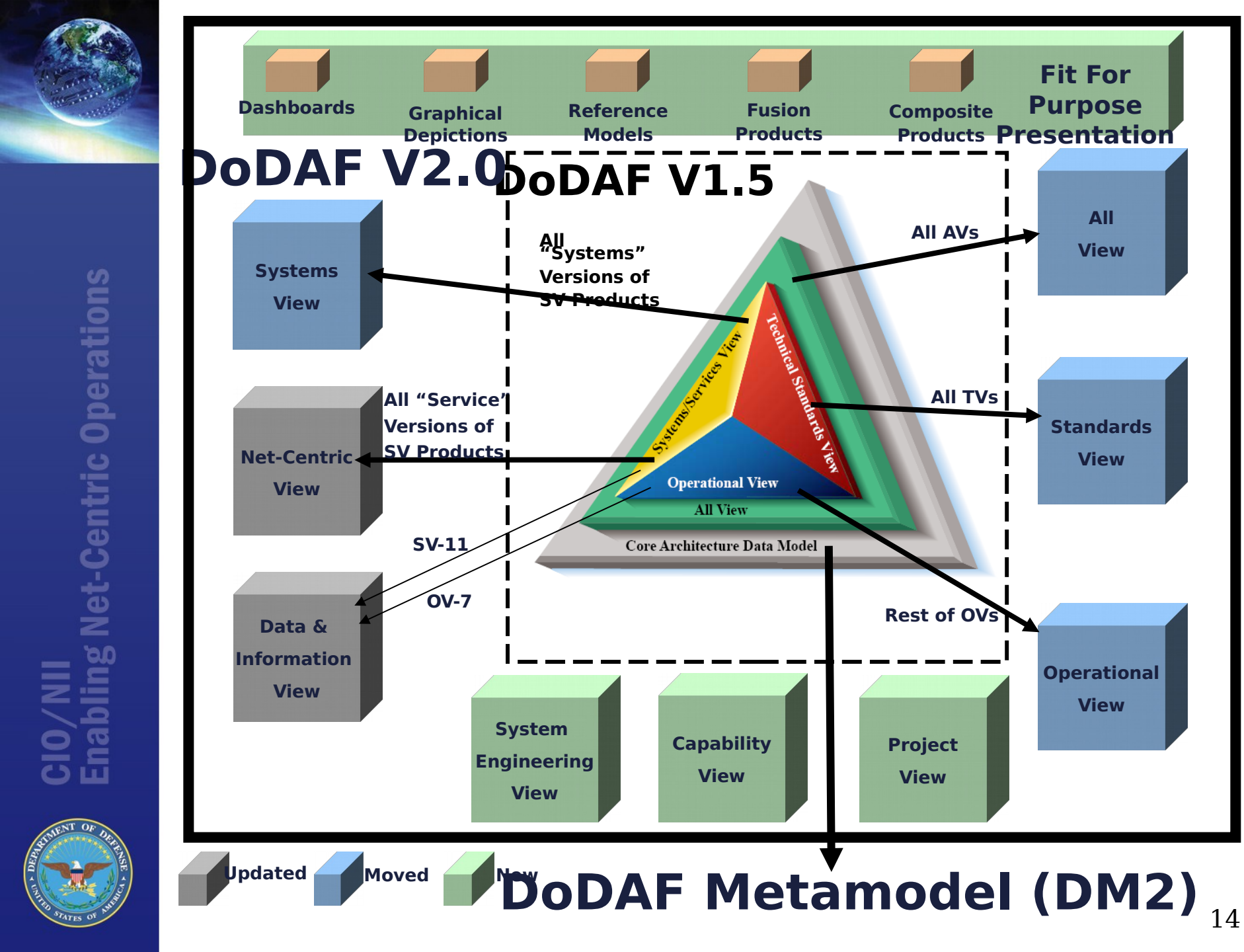
* Led and Staffed by Component Representatives

CIO/NII Enabling Net-Centric Operations

Focused on DoD Decisions

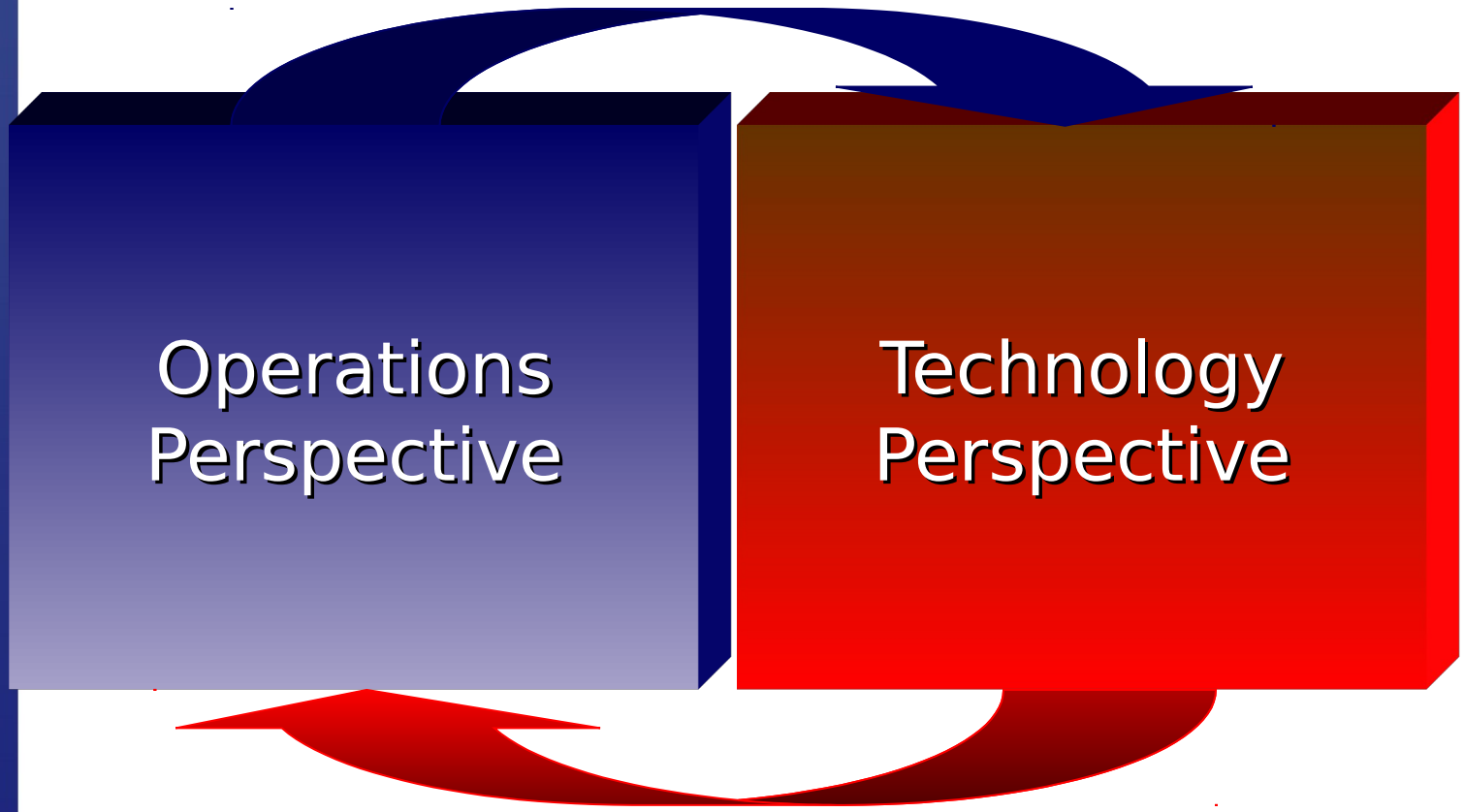


CIO/NII Enabling Net-Centric Operations


Dashboards
Graphical Depictions
Reference Models
Fusion Products
Composite Products
Fit For Purpose Presentation
DoDAF V2.0
DoDAF V1.5
Systems View
All "Systems" Versions of SV Products
All AVs
All View
All "Service" Versions of SV Products
All TVs
Standards View
Net-Centric View
Systems/Services View
Technical Standards View
Operational View
All View
Core Architecture Data Model
SV-11
OV-7
Data & Information View
Rest of OVs
Operational View
System Engineering View
Capability View
Project View
Updated
Moved
New
DoDAF Metamodel (DM2)
CIO/NII
Enabling Net-Centric Operations

DoDAF 2.0 Perspectives

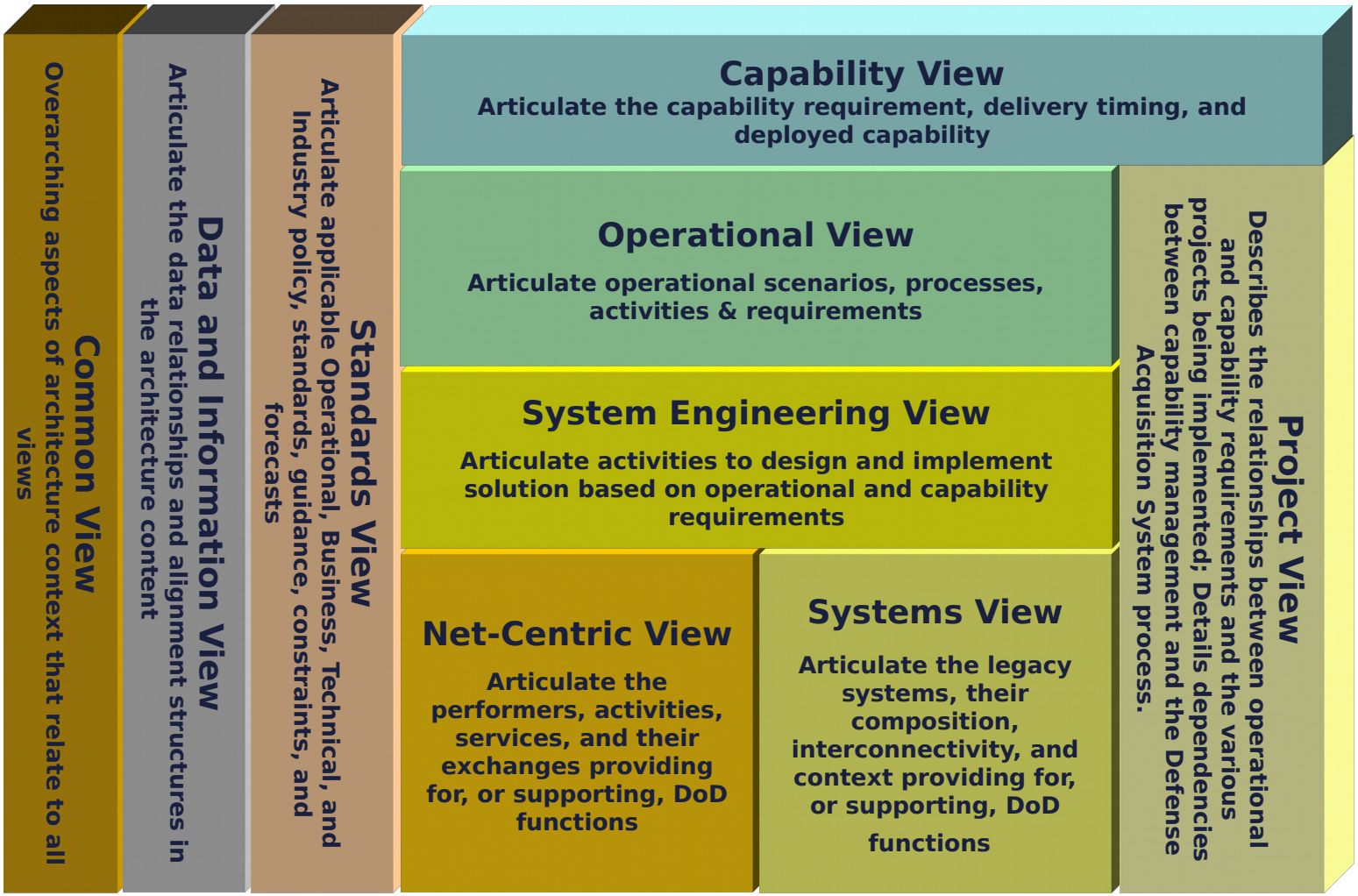
What needs to be done.
Who does it.
Information required to do it.



Systems, Services, and Technical Standards that support or enable getting things done.

CIO/NII Enabling Net-Centric Operations

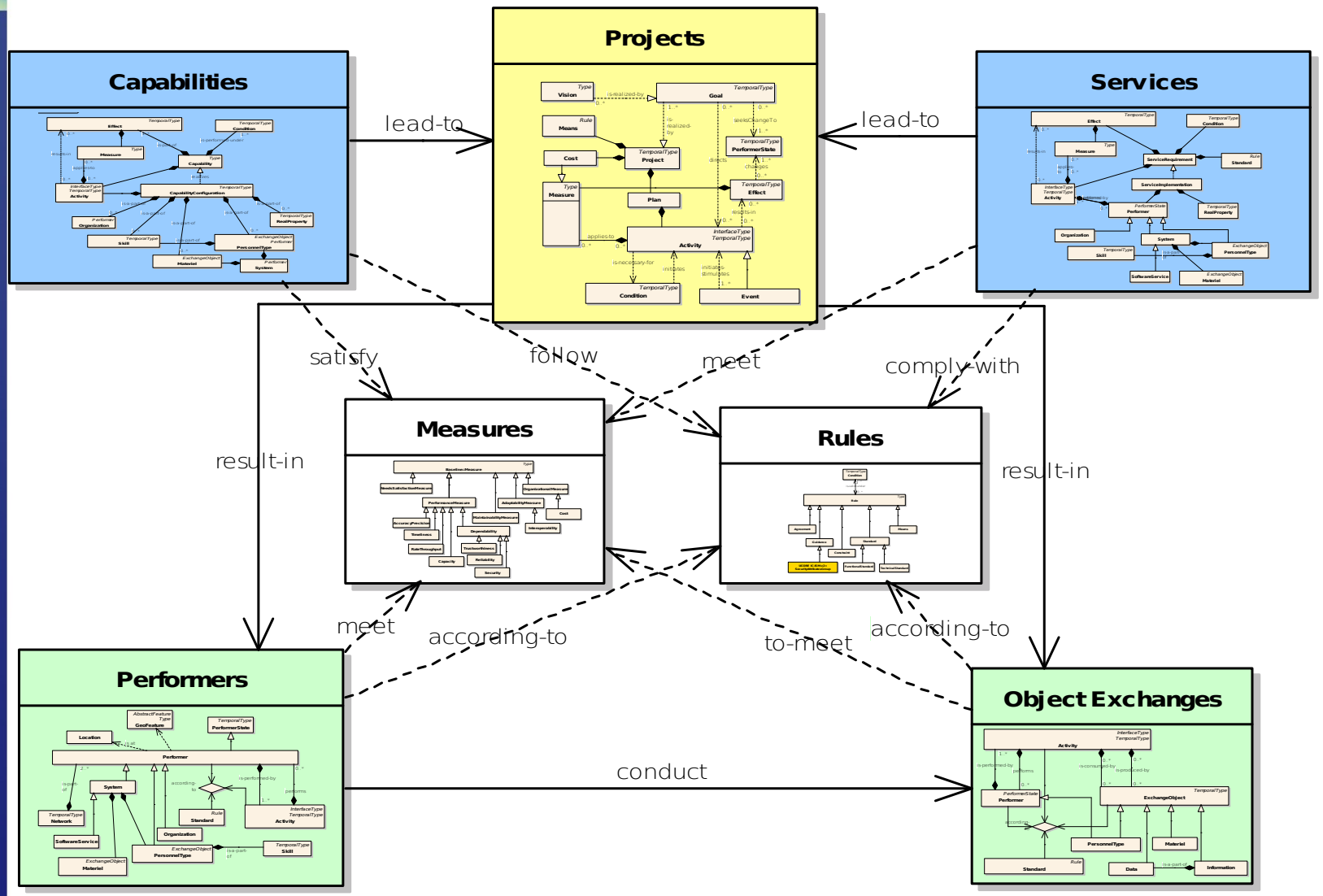
DoDAF 2.0 Views


Capability View
Articulate the capability requirement, delivery timing, and deployed capability
Operational View
Articulate operational scenarios, processes, activities & requirements
System Engineering View
Articulate activities to design and implement solution based on operational and capability requirements
Net-Centric View
Articulate the performers, activities, services, and their exchanges providing for, or supporting, DoD functions
Systems View
Articulate the legacy systems, their composition, interconnectivity, and context providing for, or supporting, DoD functions
Project View
Describes the relationships between operational and capability requirements and the various projects being implemented; Details dependencies between capability management and the Defense Acquisition System process.
Standards View
Articulate applicable Operational, Business, Technical, and Industry policy, standards, guidance, constraints, and forecasts
Data and Information View
Articulate the data relationships and alignment structures in the architecture content
Common View
Overarching aspects of architecture context that relate to all views

CIO/NII
Enabling Net-Centric Operations

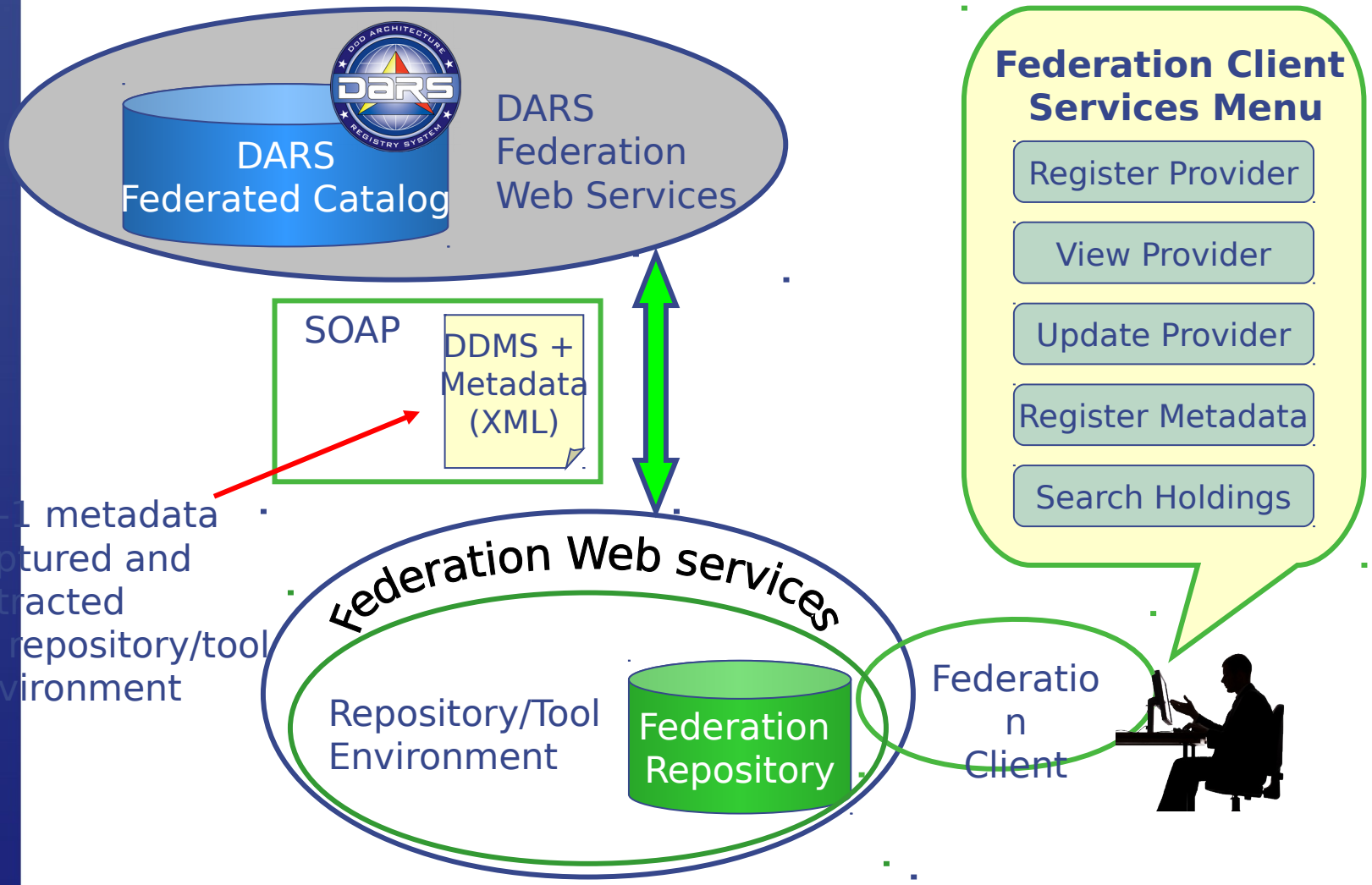
16

DoDAF Metamodel

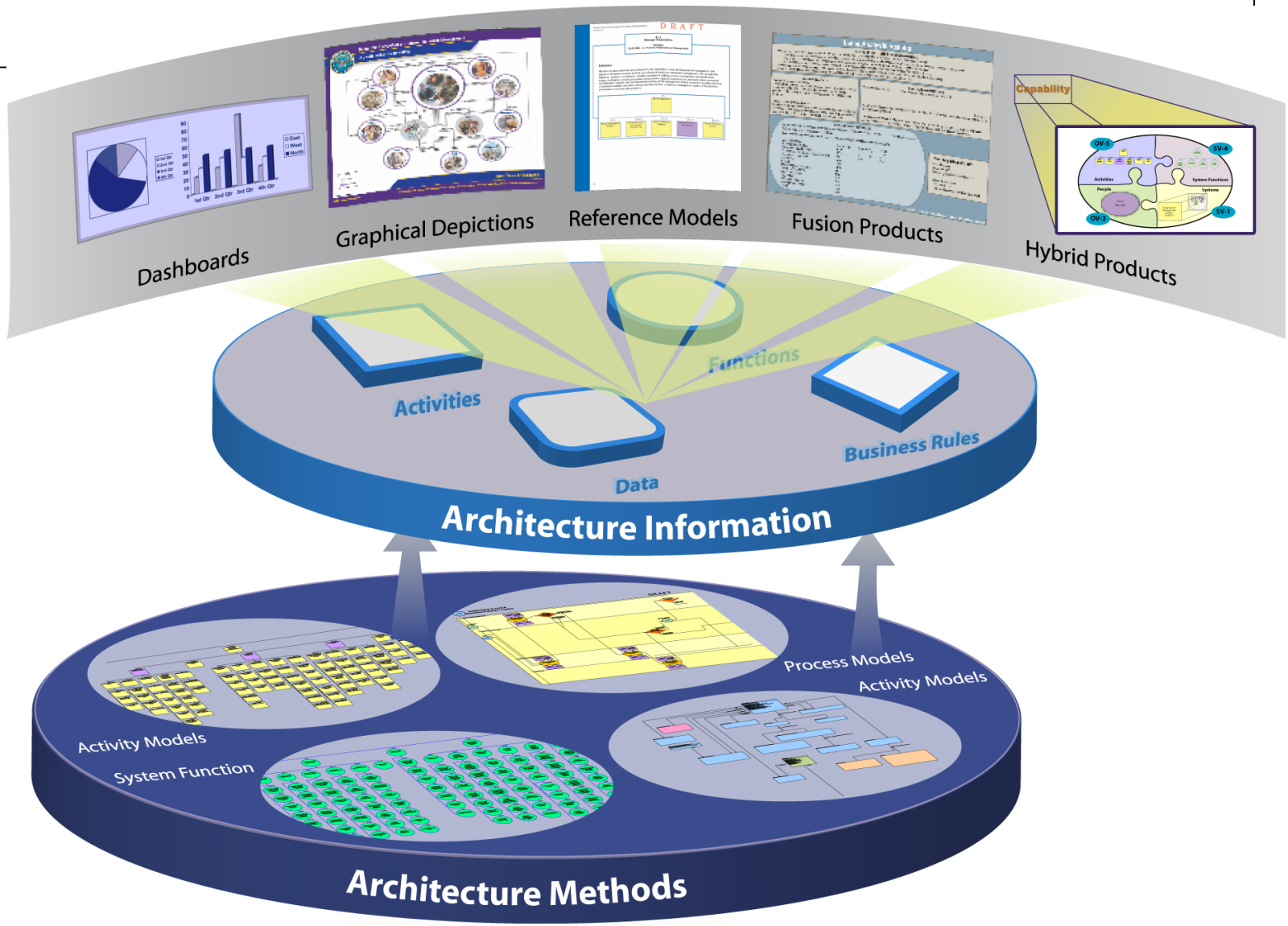


CIO/NII
Enabling Net-Centric Operations

Metadata Registration Service

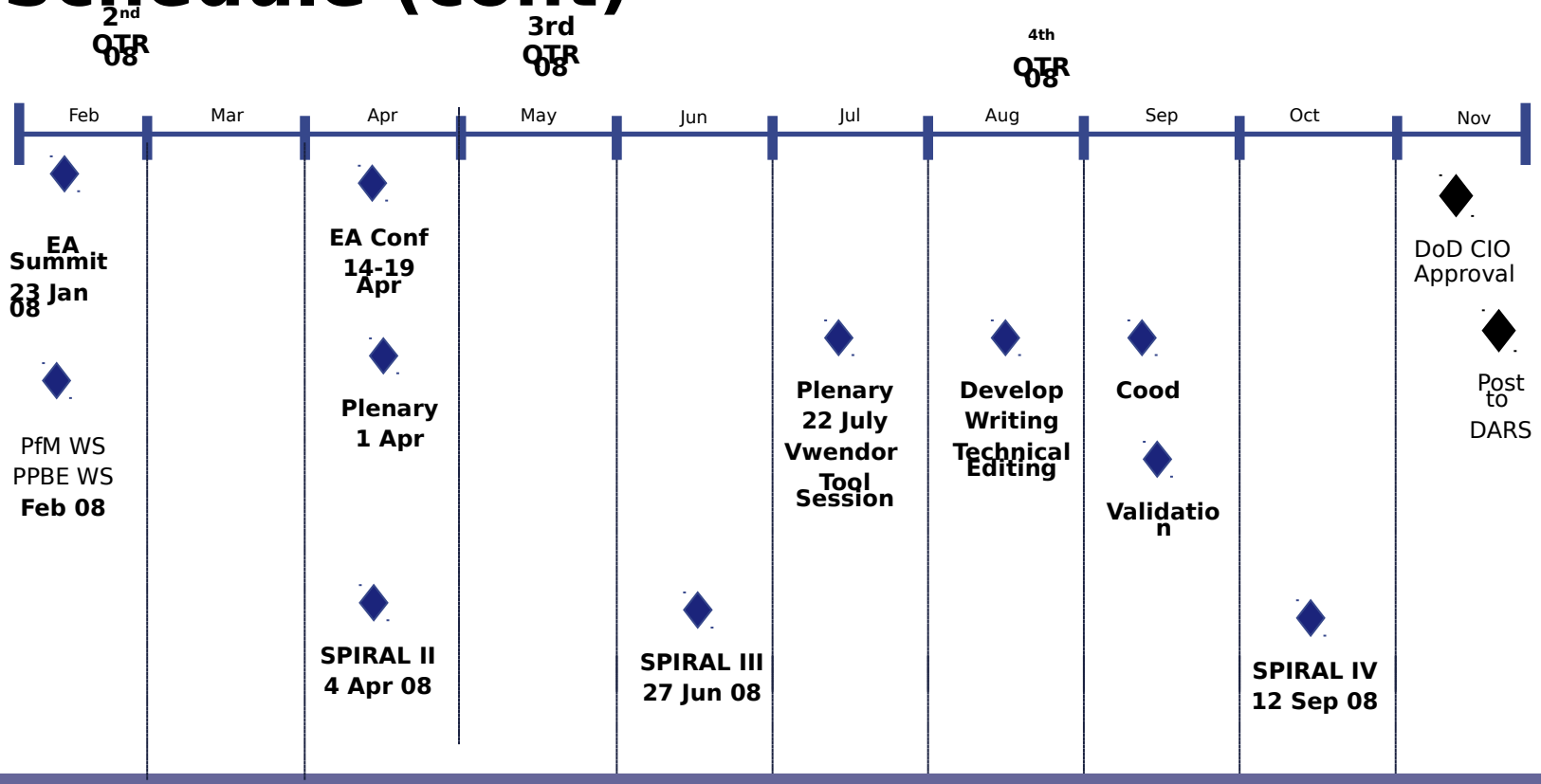


“Fit for Purpose” Architecture Descriptions



CIO/NII
Enabling Net-Centric Operations

Notional DoDAF v2.0 Development Schedule (cont)



Phase I

Phase II

Phase III

CIO/NII Enabling Net-Centric Operations

Points of Contact

- OSD
  - Brian Wilczynski brian.wilczynski2@osd.mil 703-607-0252
  - Alan Golombek alan.golombek@osd.mil 703-607-5257
  - Walt Okon walt.okon@osd.mil 703-607-0502
  - Michael Wayson michael.wayson@osd.mil 703-607-0482
  - Scott Badger scott.badger.ctr@osd.mil 703-607-0556
  - Mike McFarren mmcfarren@mitre.org 703-489-2286
- CADM
  - Francisco Loaiza floaiza@ida.org 703-845-6876
  - Forest Snyder forrest.snyder@us.army.mil 703-602-6365
- REQUIREMENTS BASELINE
  - Charles Thornburg thornburg_charles@bah.com 703-412-7937
  - Hilda Pineda pineda_hilda@bah.com 703-902-4509
- SOO
  - Tracy LaRochelle tracy.larochelle@lmco.com 703-916-7453
- SCHEDULE
  - Craig Cromwell craig.cromwell@lmco.com 703-916-7456
  - Tracy LaRochelle tracy.larochelle@lmco.com 703-916-7453
- DARS
  - Bruce Dunn bruce.dunn@us.army.mil 732-427-3674
- DEV-T LEAD
  - Craig Cromwell craig.cromwell@lmco.com 703-916-7456
- DEV-T SECRETARIAT
  - Tracy LaRochelle tracy.larochelle@lmco.com 703-916-7453

CIO/NII
Enabling Net-Centric Operations

Federated Architectures

The Connection

What the Operator Sees Today

CIO/NII
Enabling Net-Centric Operations

What the Operator Expects to See

CIO/NII
Enabling Net-Centric Operations

Ideal Architecture

DOD Architect (OSD/NII)

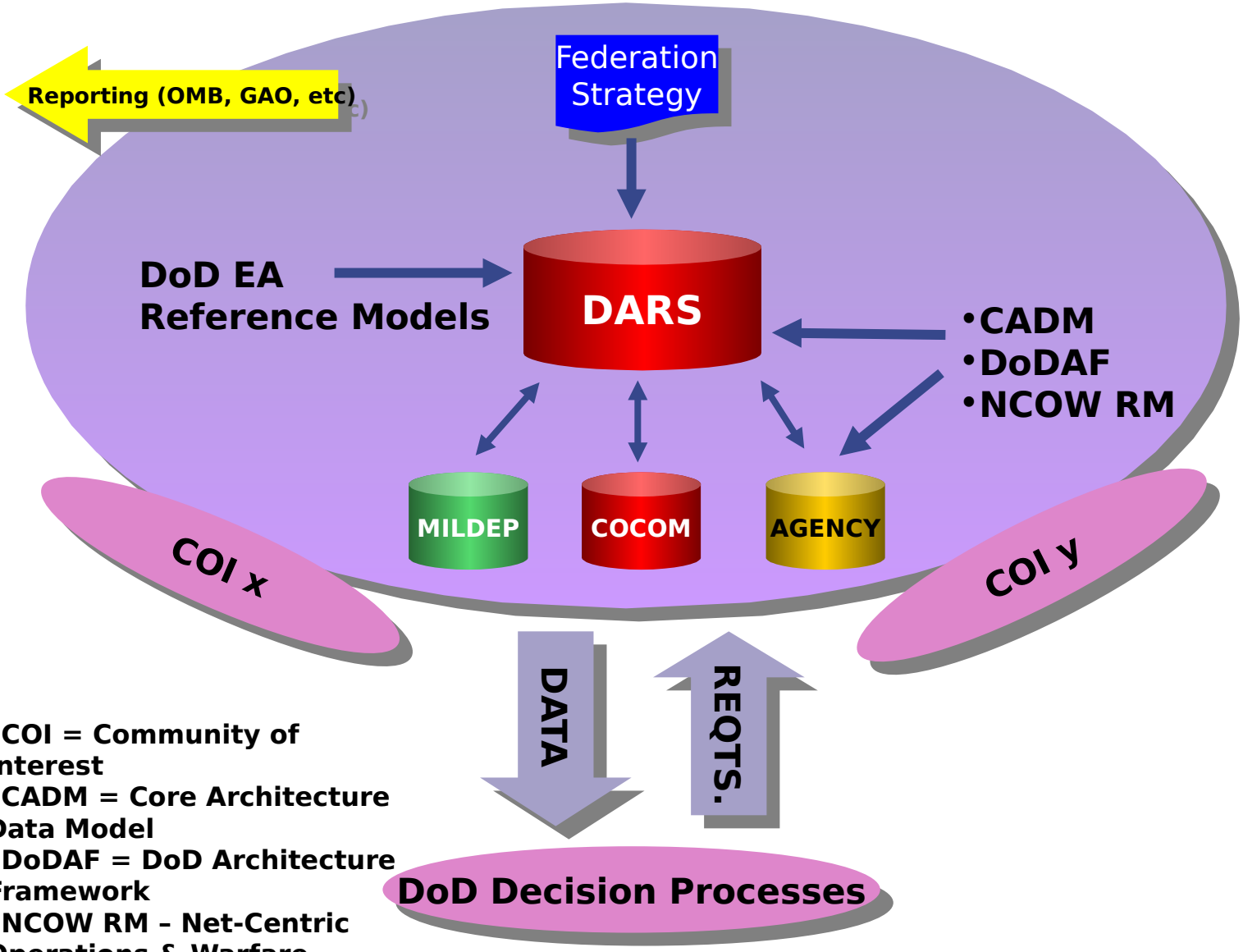
- Integrate/synchronize C/S/A architecture development with GIG
- Link funding processes tied to warfighting architectures versus service doctrine

Architectures critical to successful portfolio management

Integrated efforts lead to

The right IT capabilities to enable joint warfighting and business processes and activities ….BIG-E becomes the GIG

A Federation of Data Producers



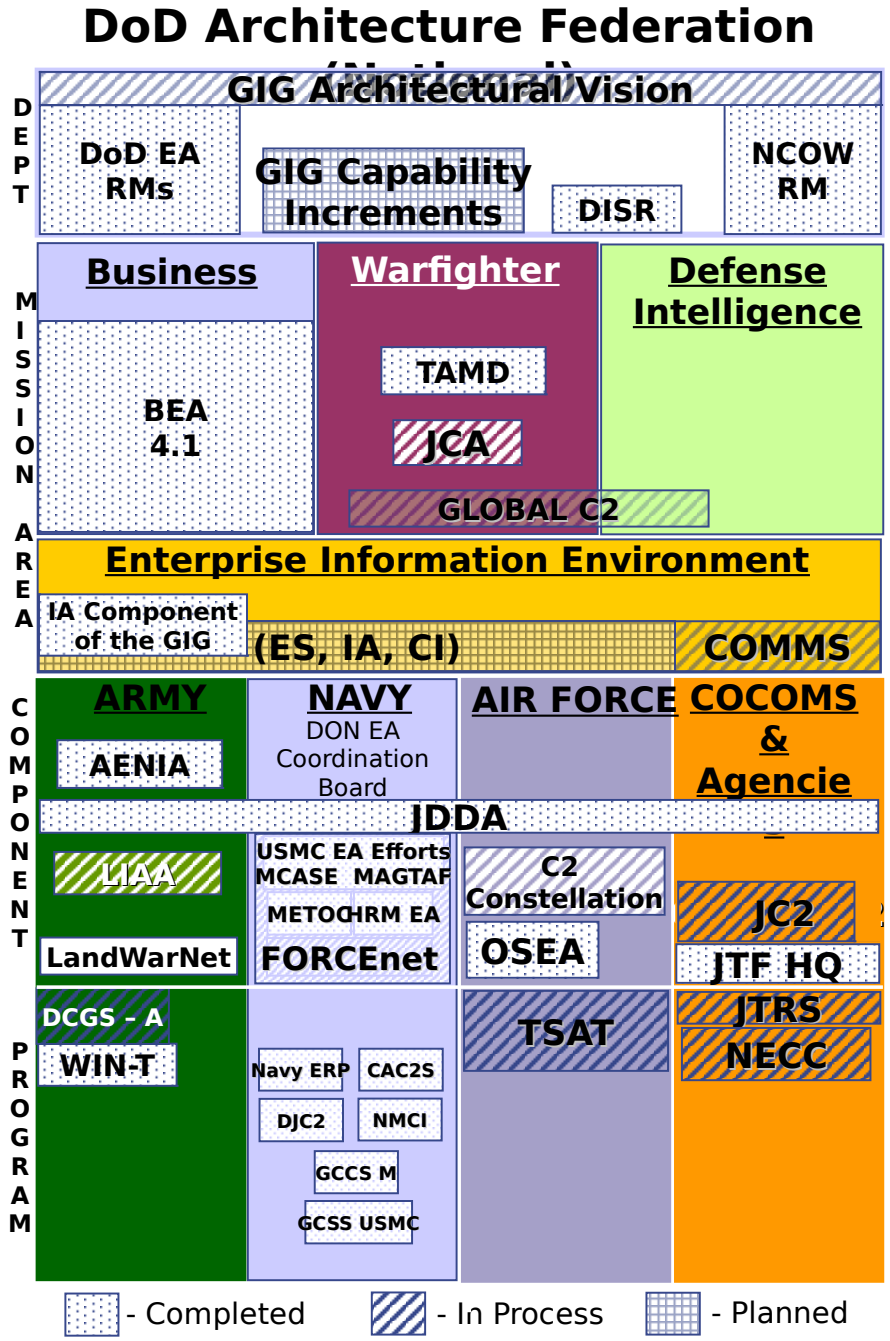
- COI = Community of Interest
- CADM = Core Architecture Data Model
- DoDAF = DoD Architecture Framework
- NCOW RM – Net-Centric Operations & Warfare Reference Model

CIO/NII Enabling Net-Centric Operations

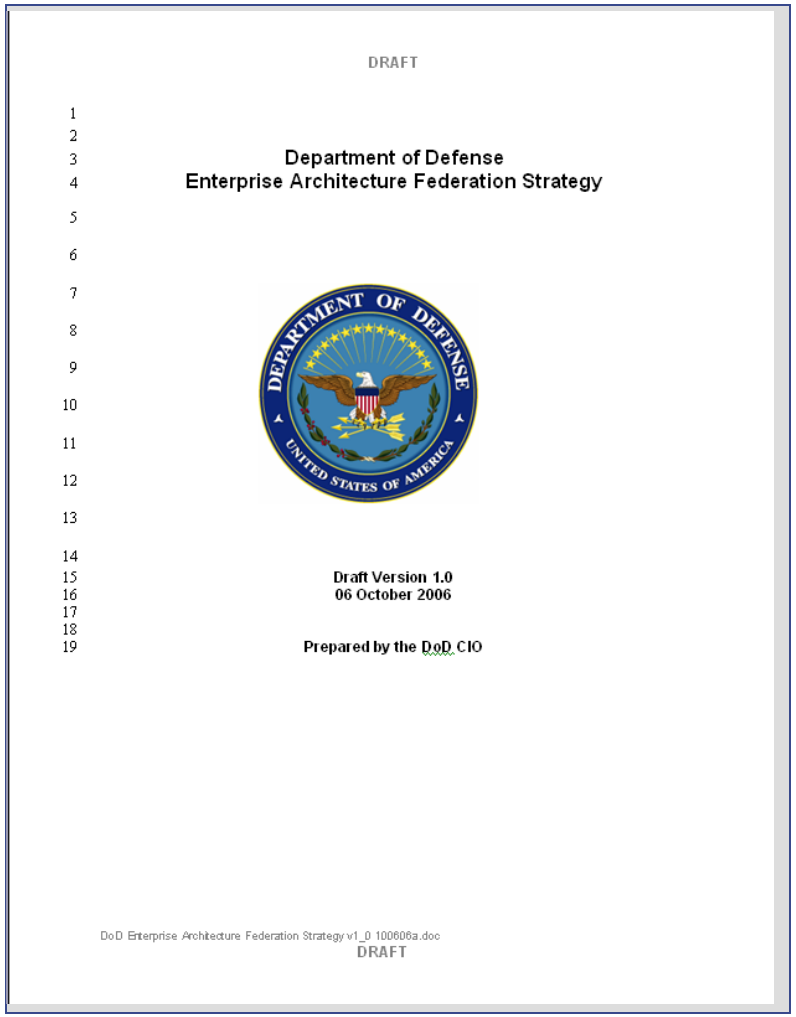
Architecture Federation

Discovery and Information Sharing

- What is Available?
- Who Owns the Content?
- Where is it Located?
- What is the Current Status?
- What Tool was it Developed in?
- What Level of Detail?



DoD EA Federation Strategy Completed



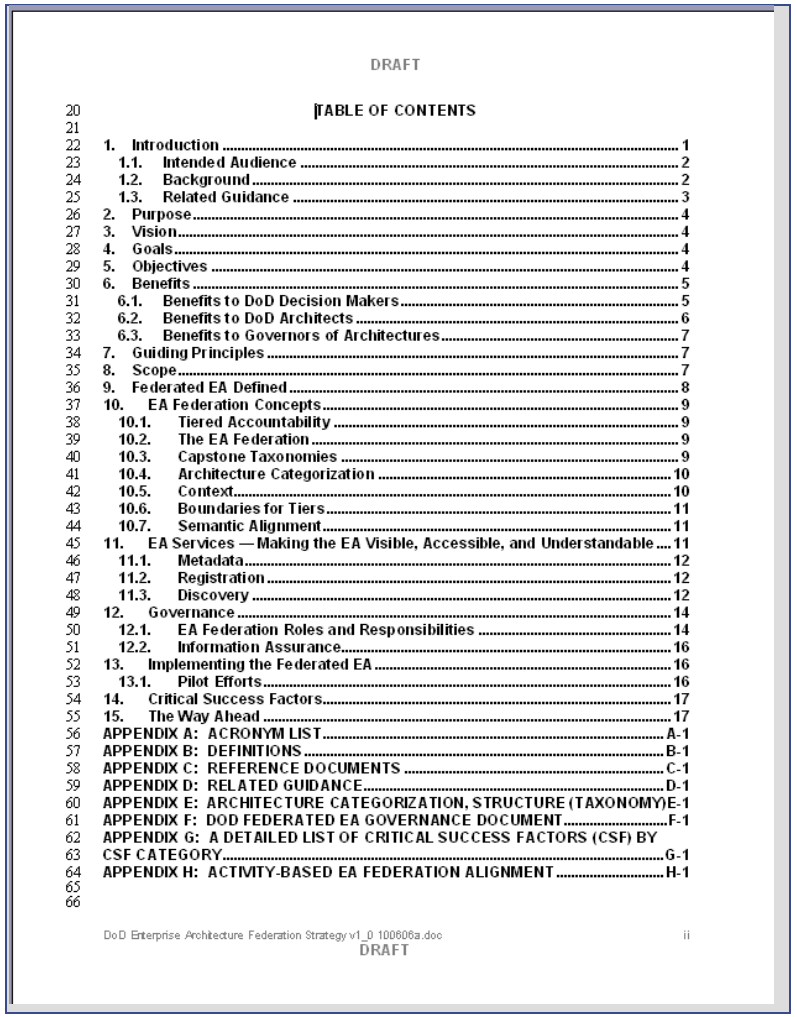
DRAFT

Department of Defense
Enterprise Architecture Federation Strategy

Draft Version 1.0
06 October 2006

Prepared by the DoD CIO

DoD Enterprise Architecture Federation Strategy v1_0 100606a.doc
DRAFT



DRAFT

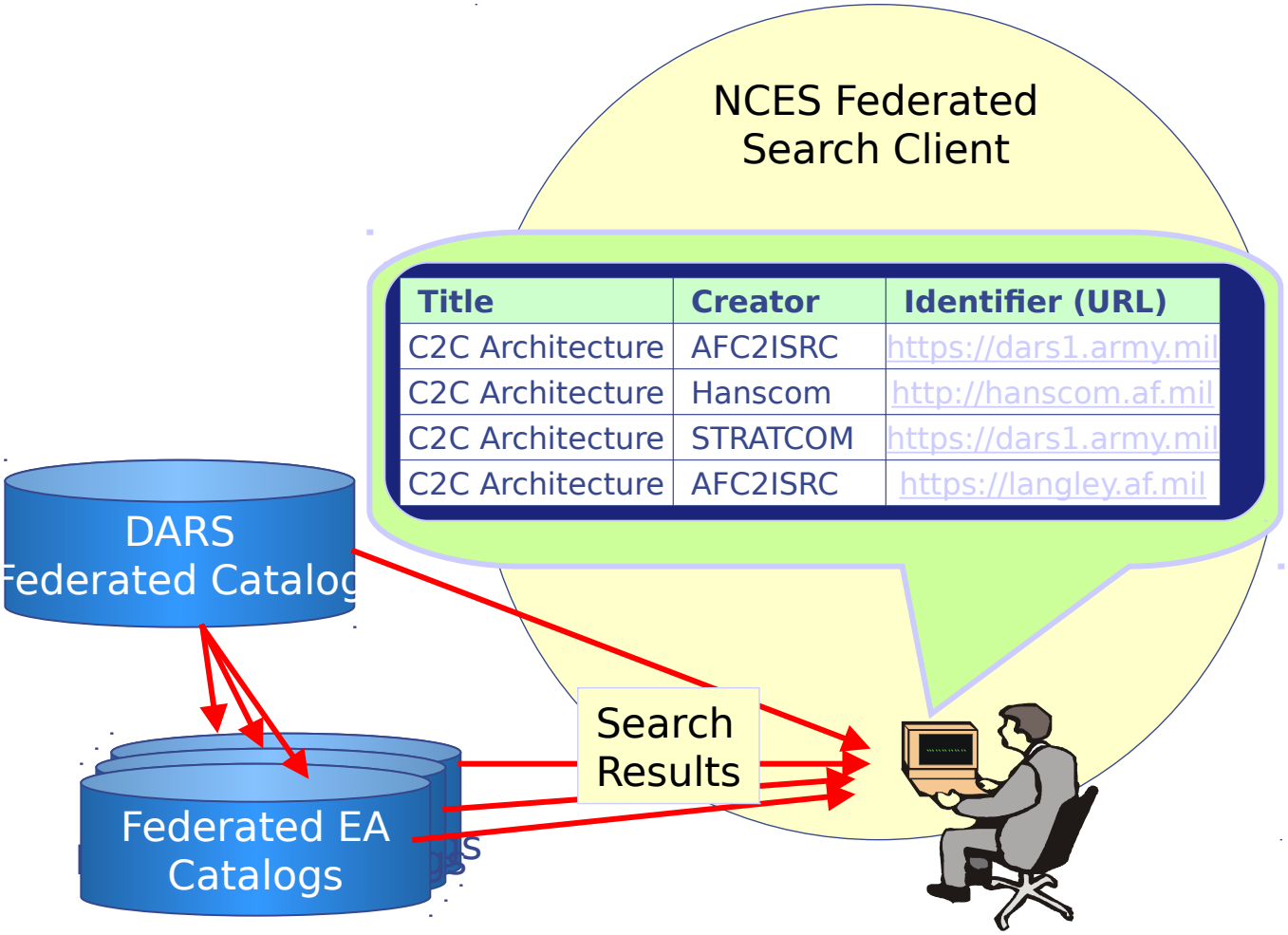
TABLE OF CONTENTS

1. Introduction 1
1.1. Intended Audience 2
1.2. Background 2
1.3. Related Guidance 3
2. Purpose 4
3. Vision 4
4. Goals 4
5. Objectives 4
6. Benefits 5
6.1. Benefits to DoD Decision Makers 5
6.2. Benefits to DoD Architects 6
6.3. Benefits to Governors of Architectures 7
7. Guiding Principles 7
8. Scope 7
9. Federated EA Defined 8
10. EA Federation Concepts 9
10.1. Tiered Accountability 9
10.2. The EA Federation 9
10.3. Capstone Taxonomies 9
10.4. Architecture Categorization 10
10.5. Context 10
10.6. Boundaries for Tiers 11
10.7. Semantic Alignment 11
11. EA Services — Making the EA Visible, Accessible, and Understandable 11
11.1. Metadata 12
11.2. Registration 12
11.3. Discovery 12
12. Governance 14
12.1. EA Federation Roles and Responsibilities 14
12.2. Information Assurance 16
13. Implementing the Federated EA 16
13.1. Pilot Efforts 16
14. Critical Success Factors 17
15. The Way Ahead 17
APPENDIX A: ACRONYM LIST A-1
APPENDIX B: DEFINITIONS B-1
APPENDIX C: REFERENCE DOCUMENTS C-1
APPENDIX D: RELATED GUIDANCE D-1
APPENDIX E: ARCHITECTURE CATEGORIZATION, STRUCTURE (TAXONOMY) E-1
APPENDIX F: DOD FEDERATED EA GOVERNANCE DOCUMENT F-1
APPENDIX G: A DETAILED LIST OF CRITICAL SUCCESS FACTORS (CSF) BY CSF CATEGORY G-1
APPENDIX H: ACTIVITY-BASED EA FEDERATION ALIGNMENT H-1

DoD Enterprise Architecture Federation Strategy v1_0 100606a.doc ii
DRAFT

Available on DARS Website: https://dars1.army.mil/IER/index.jsp

GIG Architecture Enterprise Services in Use

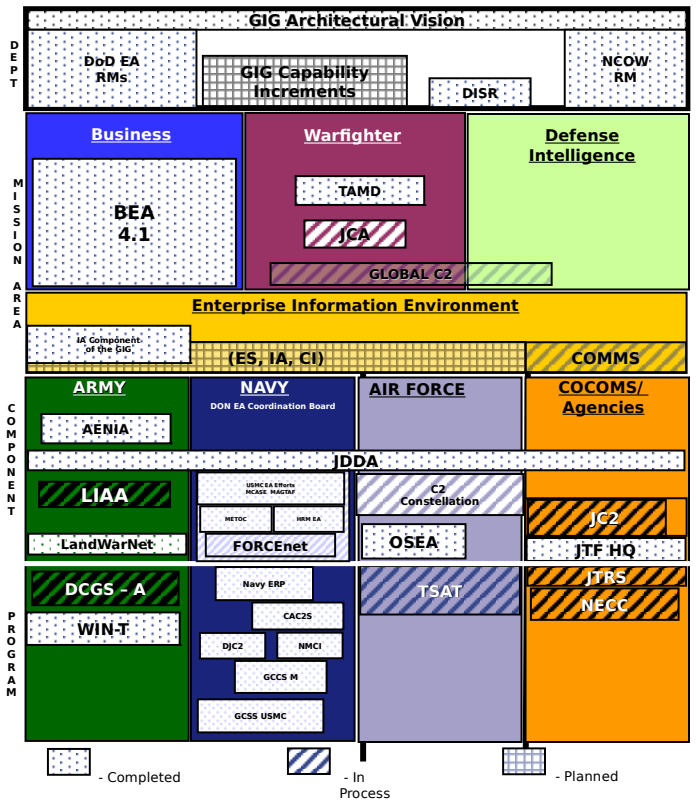


DoD EA Federation Pilot

Participants:

BTA	USTRANSCOM	Army
DARS	Marine Corps	Navy
Air Force	Joint Staff – J6I	

DoD Architecture Federation



Objectives:

- **Develop a Component value proposition to test through architecture federation (Use Case)**
- **Use Registration and Discovery services (GAES)**
- **Federate the items in the "Table" Graphic (minimum)**
- **Validate federation process and tools (technical)**
- **Validate usefulness of federation (use cases)**
- **Issue federation implementation guidance**

DoD EA Federation Pilot Use Cases

- **BTA/USTRANSCOM/Marine Corps:**
  - **Federate the BEA with JDDA and Marine Corps Logistic architectures and register in DARS to gain visibility into "end to end" logistics process**
- **Army:**
  - **Create a "knowledge base" through architecture federation for Army communities.**
  - **Test tools and concepts through federation, i.e. social networking (ontology development, semantic indexing,) architecture data analysis, UPDM applicability**
- **Air Force:**
  - **Establish interface and search capability between DARS and AFARS. Demonstrate search capability**
- **Navy:**
  - **Implement and use procedures outlined in the GIG Enterprise Architecture Federation Strategy and DARS CONOPS to create a repeatable federation process**
- **Joint Staff/J6I:**
  - **Identify interface points and alignment between Mission Area-level architectures to obtain enable a horizontal view across mission areas and drill down to Program level.**
- **DARS:**
  - **Develop registration template for AV-1 and DDMS metadata**

Points of Contact

- OSD: DoDAF & Architecture Federation
  - Brian Wilczynski brian.wilczynski2@osd.mil 703-607-5257
  - Walt Okon walt.okon@osd.mil 703-607-0502
  - Alan Golombek alan.golombek@osd.mil 703-607-5727
  - Michael Wayson michael.wayson@osd.mil 703-607-0482
  - Scott Badger scott.badger.ctr@osd.mil 703-607-0556
- DARS
  - Bruce Dunn bruce.dunn@us.army.mil 732-427-3674
  - Tracy LaRochelle tracy.larochelle@lmco.com 703-916-7453

CIO/NII Enabling Net-Centric Operations

CIO/NII
Enabling Net-Centric Operations

DoD IT Standards Registry (DISR)
IC/DoD IT Standards Registry

Walt Okon

Senior Architect Engineer

Architecture & Interoperability Directorate
Office of the DoD CIO/ASD NII

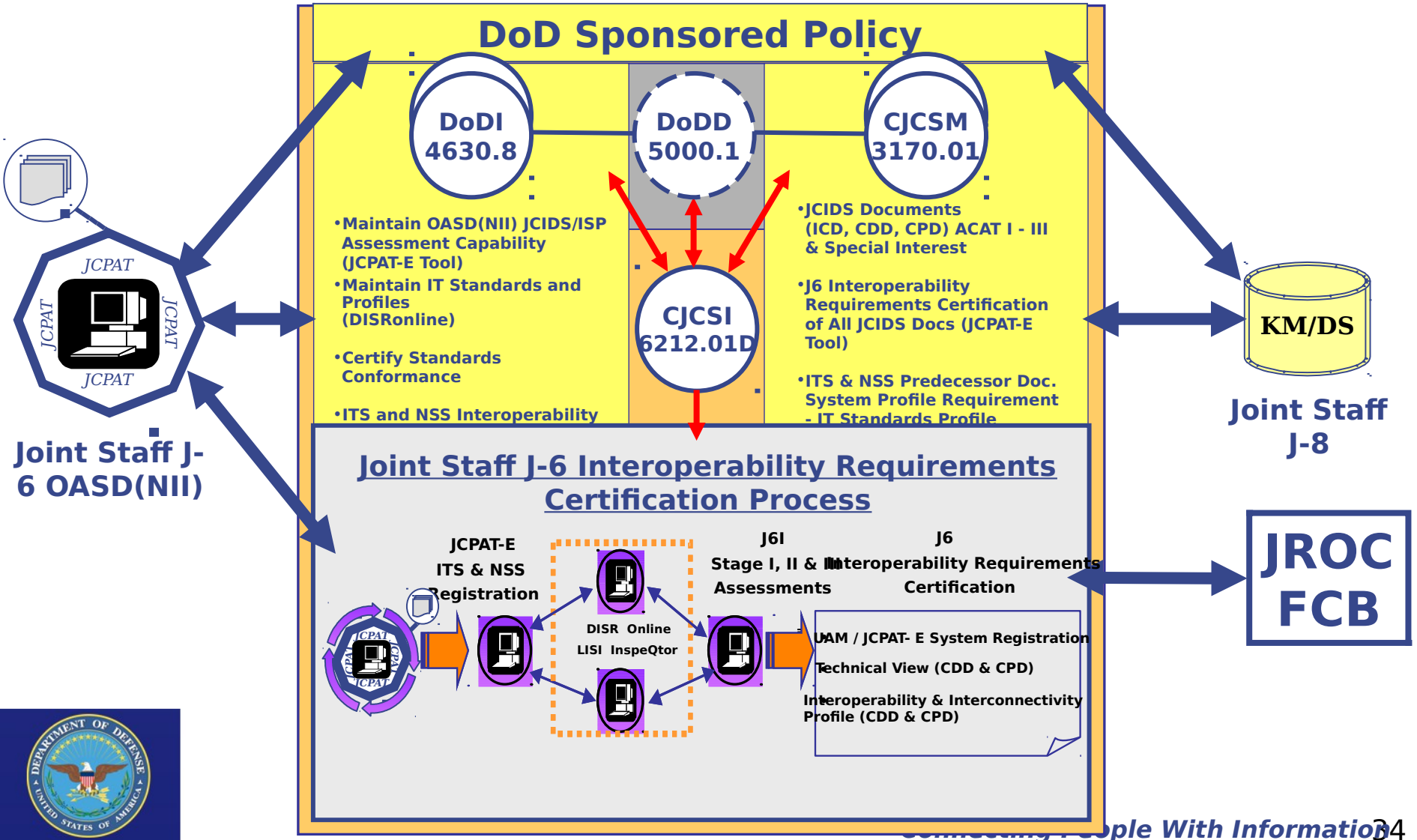
28 July 2008

Information Technology Standards Authority

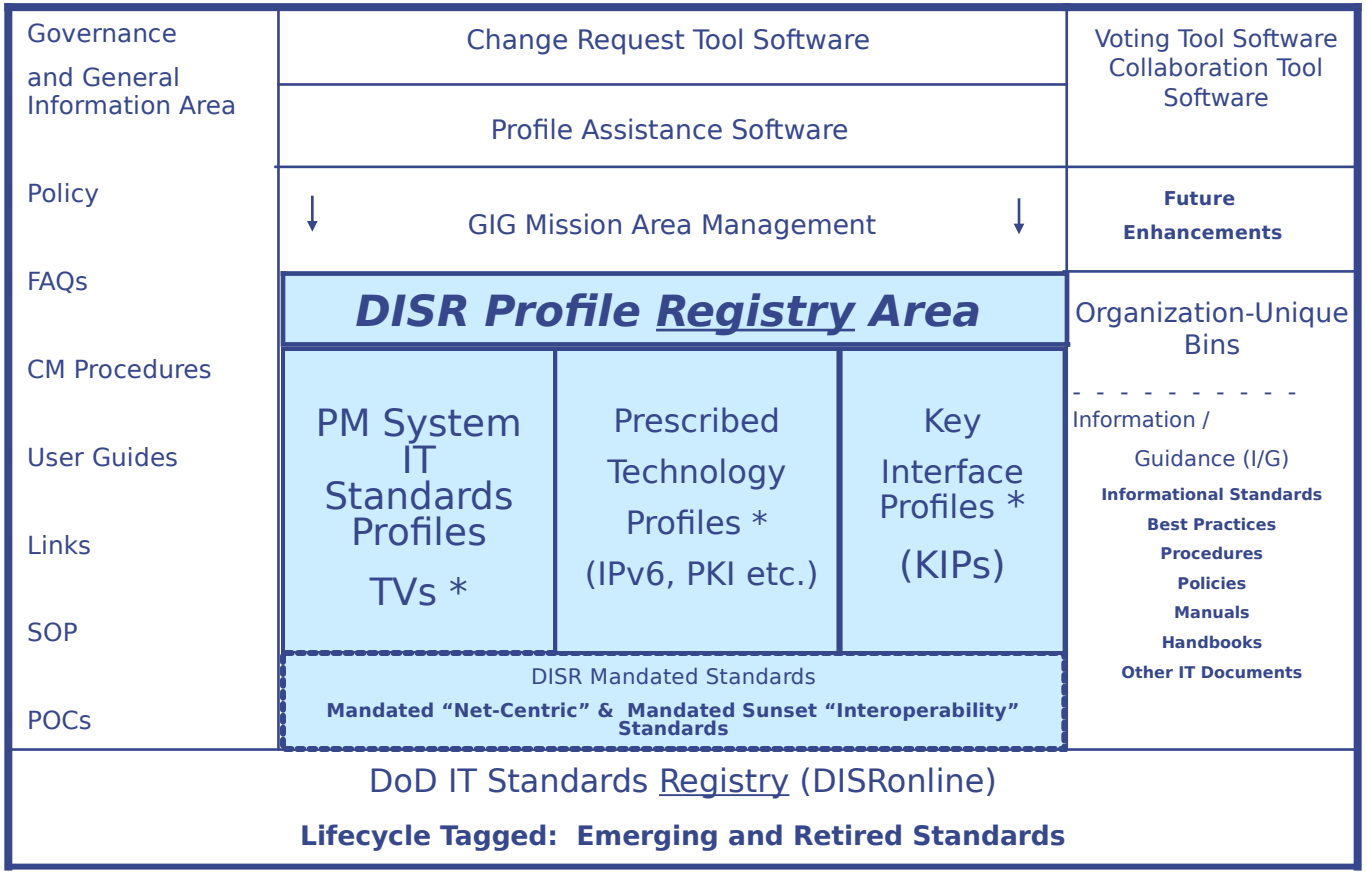
- Clinger-Cohen Act
  - **Requires Performance Based Management Principles for Acquiring Information Technology (IT), Including National Security Systems (NSS)**

- DoD Directive (DoDD) 5101.7
  - **DoD Executive Agent for Information Technology Standards**
    - Develop, Prescribe, and Implement IT and NSS Standards Throughout the DoD.

IT and NSS Interoperability and Supportability Policy and Process Overview


DoD Sponsored Policy
DoDI 4630.8
DoDD 5000.1
CJCSM 3170.01
CJCSI 6212.01D
•Maintain OASD(NII) JCIDS/ISP Assessment Capability (JCPAT-E Tool)
•Maintain IT Standards and Profiles (DISRonline)
•Certify Standards Conformance
•ITS and NSS Interoperability
•JCIDS Documents (ICD, CDD, CPD) ACAT I - III & Special Interest
•J6 Interoperability Requirements Certification of All JCIDS Docs (JCPAT-E Tool)
•ITS & NSS Predecessor Doc. System Profile Requirement - IT Standards Profile
JCPAT
Joint Staff J-6 OASD(NII)
KM/DS
Joint Staff J-8
Joint Staff J-6 Interoperability Requirements Certification Process
JCPAT-E ITS & NSS Registration
DISR Online
LISI InspeQtor
J6I Stage I, II & III Assessments
J6 Interoperability Requirements Certification
JAM / JCPAT- E System Registration
Technical View (CDD & CPD)
Interoperability & Interconnectivity Profile (CDD & CPD)
JROC FCB

DISR and DISRonline Architecture View



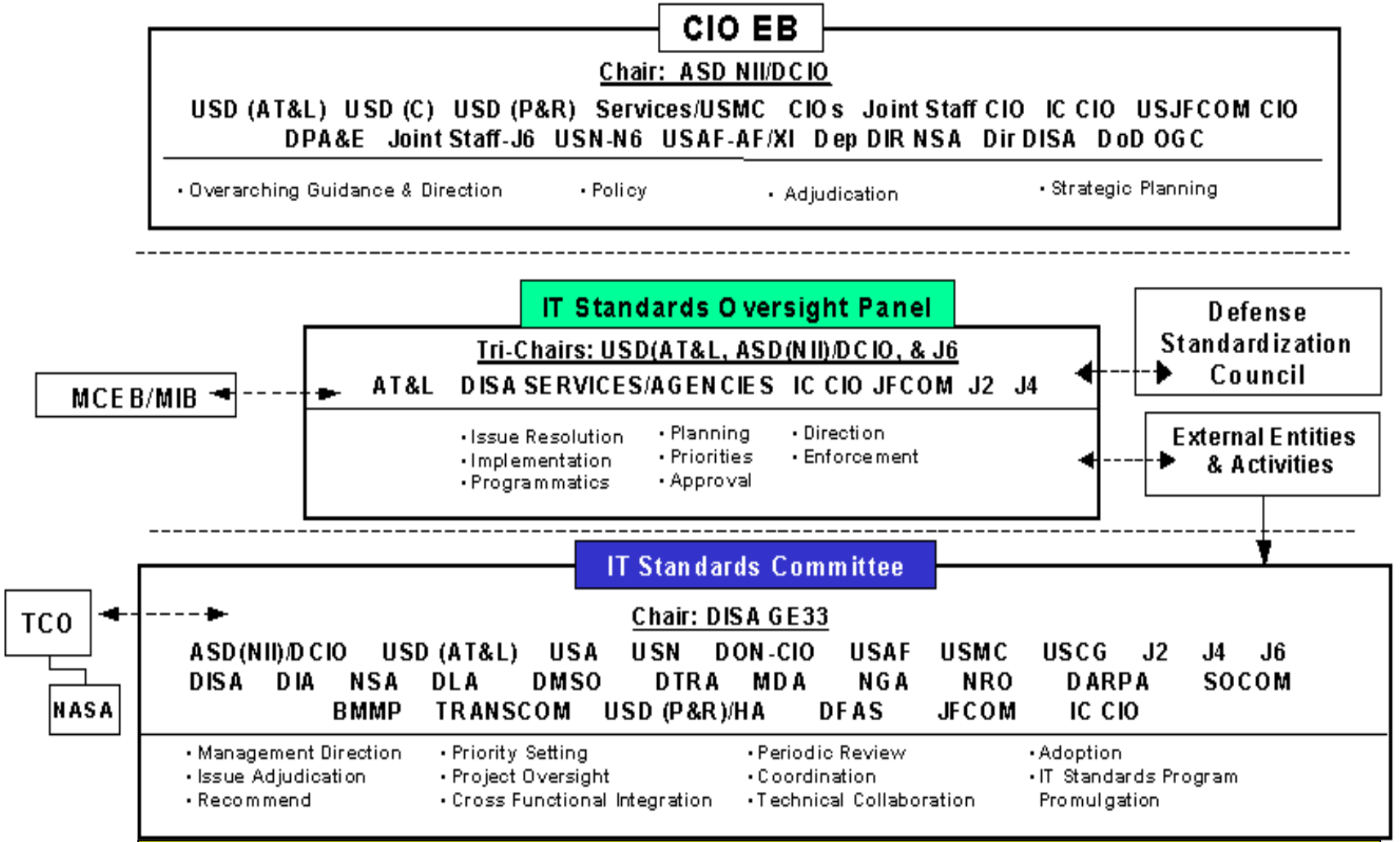
- **Objectives:**
- Champion DoD's Re-Engagement of the IT Standards Communities
- Online IT standards Registry
- Tri-Annual Update of IT Standards Registry
- Tied to JCIDS IT Standards Conformance and Compliance Process
- Intelligence Community Cross Coordination (ICSR)
- Improved DoD Visibility and Participation in IT Standards Development Organizations
- Develop and Register PM Standards Profiles (TV)
- Standing IT Standards Working Groups Aligned to GIG Portfolio Management

* May Contain Standards from Lifecycle Categories other than Mandated

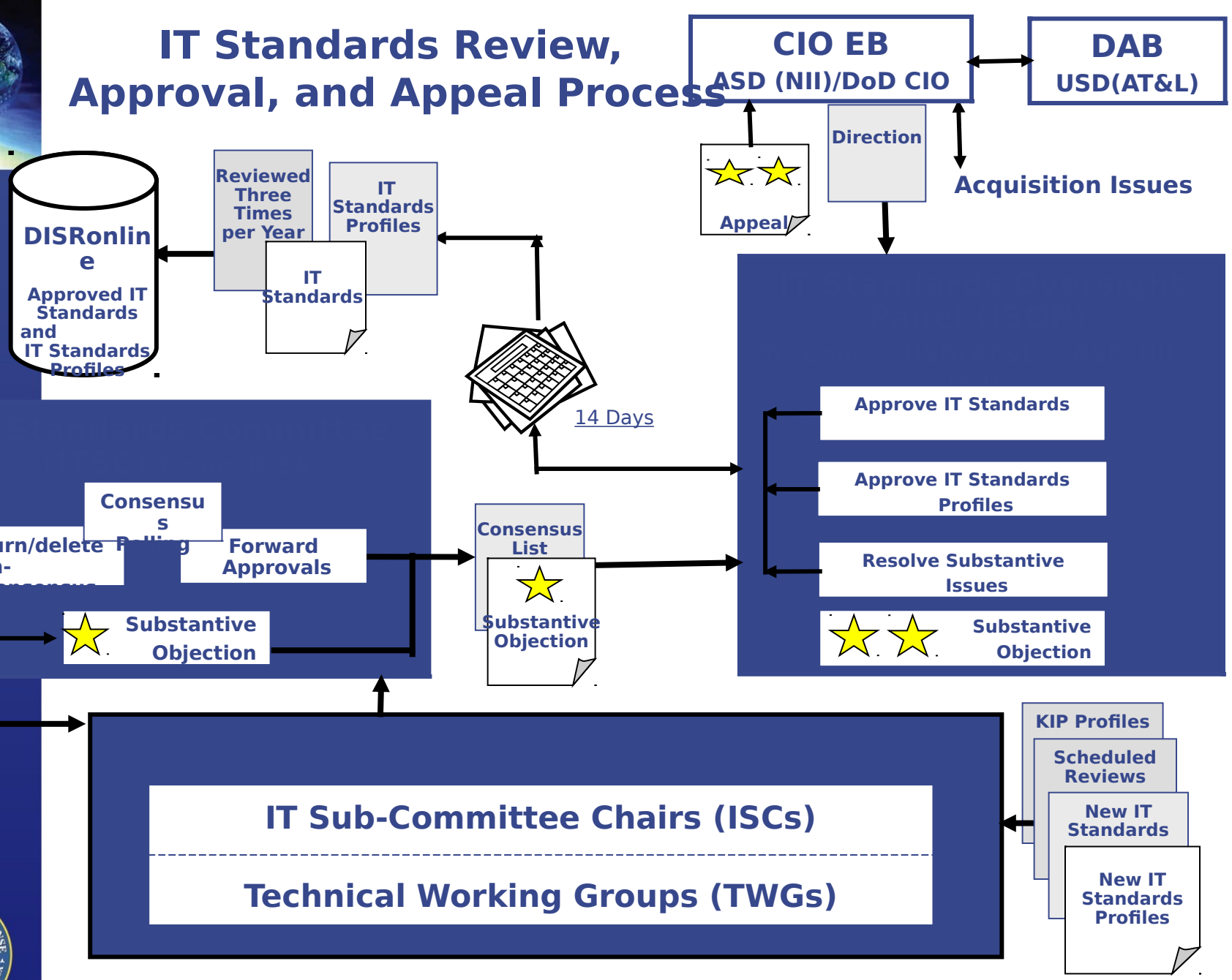
Lifecycle of a Standard

- Emerging
  - Upgradeability Should be a Concern
  - May be Implemented but Not in Lieu of Mandated Standard
  - Expected to be Mandated within Three Years
- Mandated
  - Essential for Interoperability and Net-Centric Services in DoD
  - ***Minimum Set of Essential Standards for the Acquisition of All DoD Systems that Produce, Use, or Exchange Info, and, When Implemented, Facilitates the Flow of Info in Support of Warfighter***
  - Sunset Tag Identifies an Event and Date to Retire a Standard
- Inactive / Retired
  - New Standards / Technology Now Available and Implemented
  - Require Waiver and Migration Plan
  - Remain in the Registry

IT Standards Governance Organization Membership



IT Standards Review, Approval, and Appeal Process

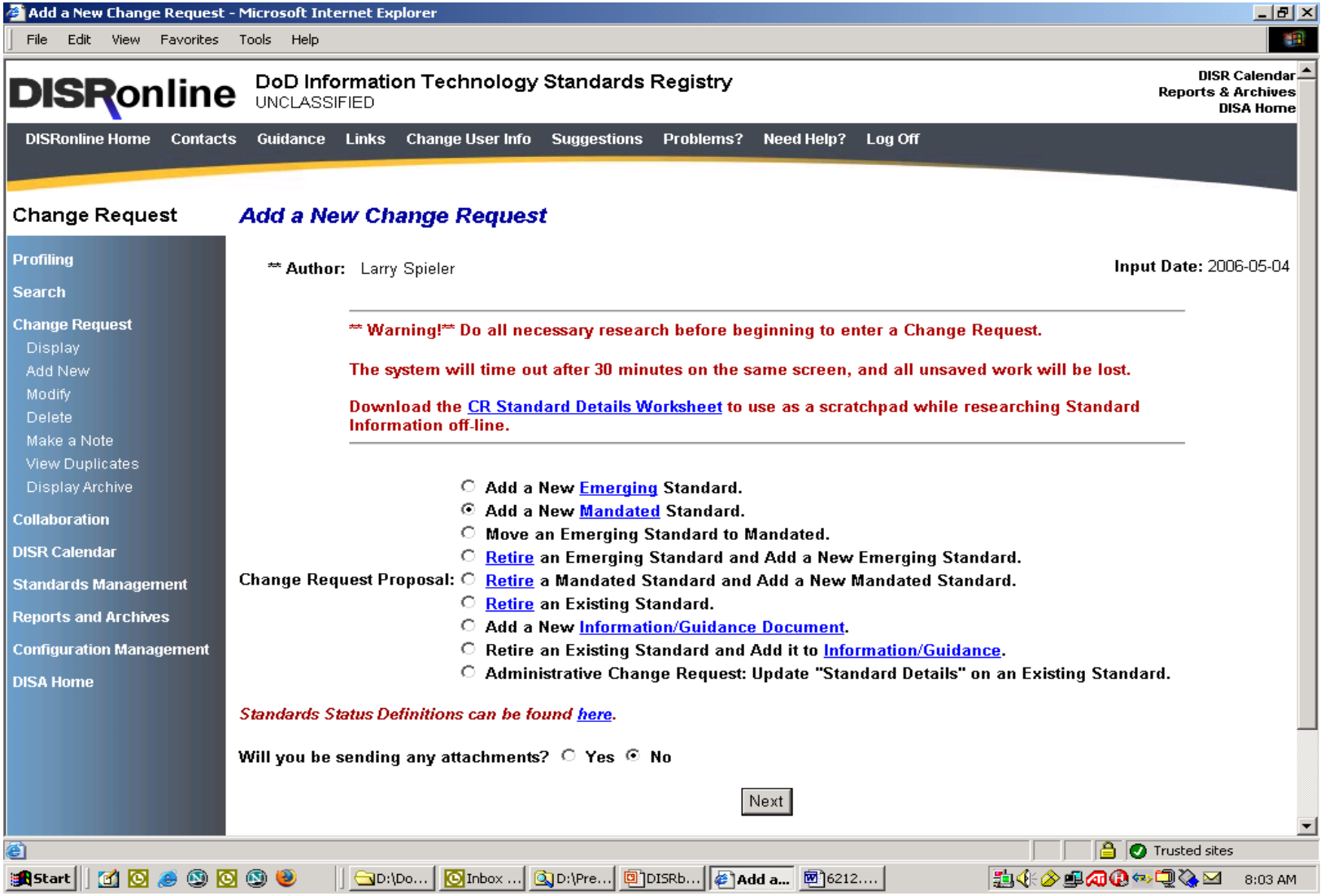


CIO/NII
Enabling Net-Centric Operations

DISR Configuration Management Scheduled Review of Standards

- Standards are Periodically Reviewed
  - To Reconfirm Status in the Standards Lifecycle
  - Investigate Alternative Technologies and Follow-Ons
- Emerging Standards
  - Reviewed Annually
  - Expected to be Mandated within Three Years -- or Replace with New Technology
- Mandated Standards
  - Reconfirmed Every Three Years
  - Still Support Interoperability and Net-Centric Services?
  - Identify Replacement Standard?

Standards Configuration Management


Add a New Change Request - Microsoft Internet Explorer
File Edit View Favorites Tools Help
DISRonline
DoD Information Technology Standards Registry
UNCLASSIFIED
DISR Calendar
Reports & Archives
DISA Home
DISRonline Home Contacts Guidance Links Change User Info Suggestions Problems? Need Help? Log Off
Change Request
Add a New Change Request
Profiling
Search
Change Request
Display
Add New
Modify
Delete
Make a Note
View Duplicates
Display Archive
Collaboration
DISR Calendar
Standards Management
Reports and Archives
Configuration Management
DISA Home
** Author: Larry Spieler
Input Date: 2006-05-04
** Warning!** Do all necessary research before beginning to enter a Change Request.
The system will time out after 30 minutes on the same screen, and all unsaved work will be lost.
Download the CR Standard Details Worksheet to use as a scratchpad while researching Standard Information off-line.
Change Request Proposal:
Add a New Emerging Standard.
Add a New Mandated Standard.
Move an Emerging Standard to Mandated.
Retire an Emerging Standard and Add a New Emerging Standard.
Retire a Mandated Standard and Add a New Mandated Standard.
Retire an Existing Standard.
Add a New Information/Guidance Document.
Retire an Existing Standard and Add it to Information/Guidance.
Administrative Change Request: Update "Standard Details" on an Existing Standard.
Standards Status Definitions can be found here.
Will you be sending any attachments? Yes No
Next
Trusted sites
Start
8:03 AM

CIO/NII Enabling Net-Centric Operations

Summary

- **Provide oversight of DoD Standards program.**
- **Provide review and recommendations on DoD Standards and Profiles**
- **Manage review process and operations of the DoD IT Standards Registry**
- **Ensure minimal set of IT and NSS standards to achieve Interoperability and Net-Centric capabilities.**
- **Responsive and Agile Governance Structure**
  - Technical WGs Address Day-to-Day Standards Issues
  - Organized by GIG Core Enterprise Services
  - Intelligence Community Participates at All Levels
- **DNI is integrated into this process - ICSR**
- **DoD and DOJ are building a CTISS Federated Standards Registry (CTISR) for all Federal Departments, State, Local and Tribal Organizations**
  - **Information Sharing**
  - **PM-ISE**

CIO/NII
Enabling Net-Centric Operations

DoD Architecture Training

Walt Okon

Walt Okon

Senior Architect Engineer

Architecture & Interoperability Directorate
Office of the DoD CIO/ASD NII

28 July 2008

DoD Architecture Training

- **Description**

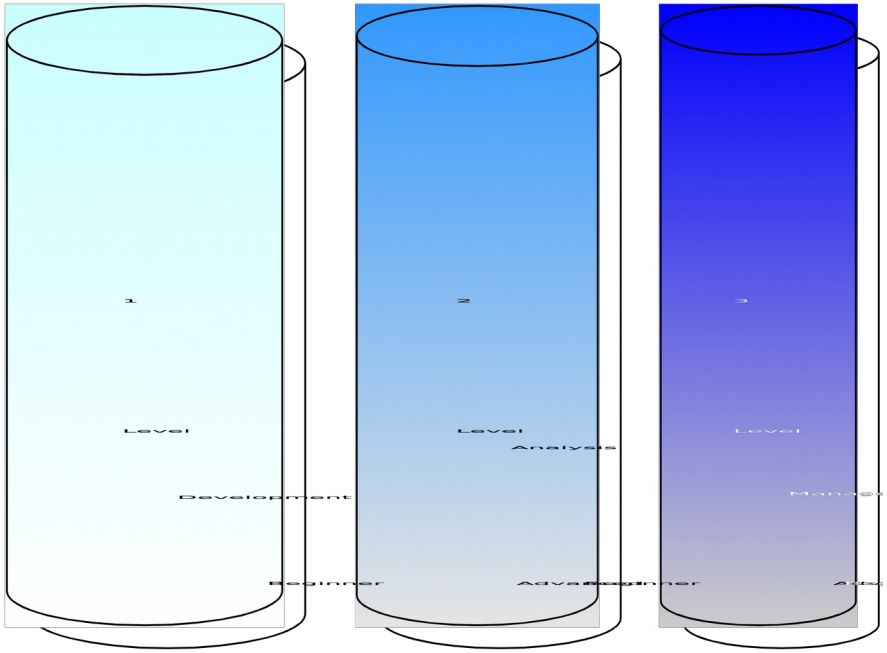
  –The DoD Architecture Training effort identifies the core KSAs Architects must have to be able to design, develop, and deliver DoD architectures that enable senior leader decision making and engineering design.

  –Analyze and define the types of architecture training at different levels of architecture.

  –Define a certification requirement and process.

CIO/NII
Enabling Net-Centric Operations

A Competency Framework for the DoD Architect



- **Three Levels of Maturity**
  - The framework acts as a standard for the knowledge, skills, and abilities Architects should obtain at varying levels of maturity
  - Architects are expected to perform the functions of the role represented by each level: Level 1 - development, Level 2 - analysis, and Level 3 - management

DOD Architect Levels

- **Level 1 Development**

  Primary function is to develop architectures based on user requirements and input from subject matter experts

- **Level 2 Analysis**

  Primary function is to analyze architectures for the purposes of integration, interoperability, gap analysis, risk assessment, leveragability, compliance, and business decision making

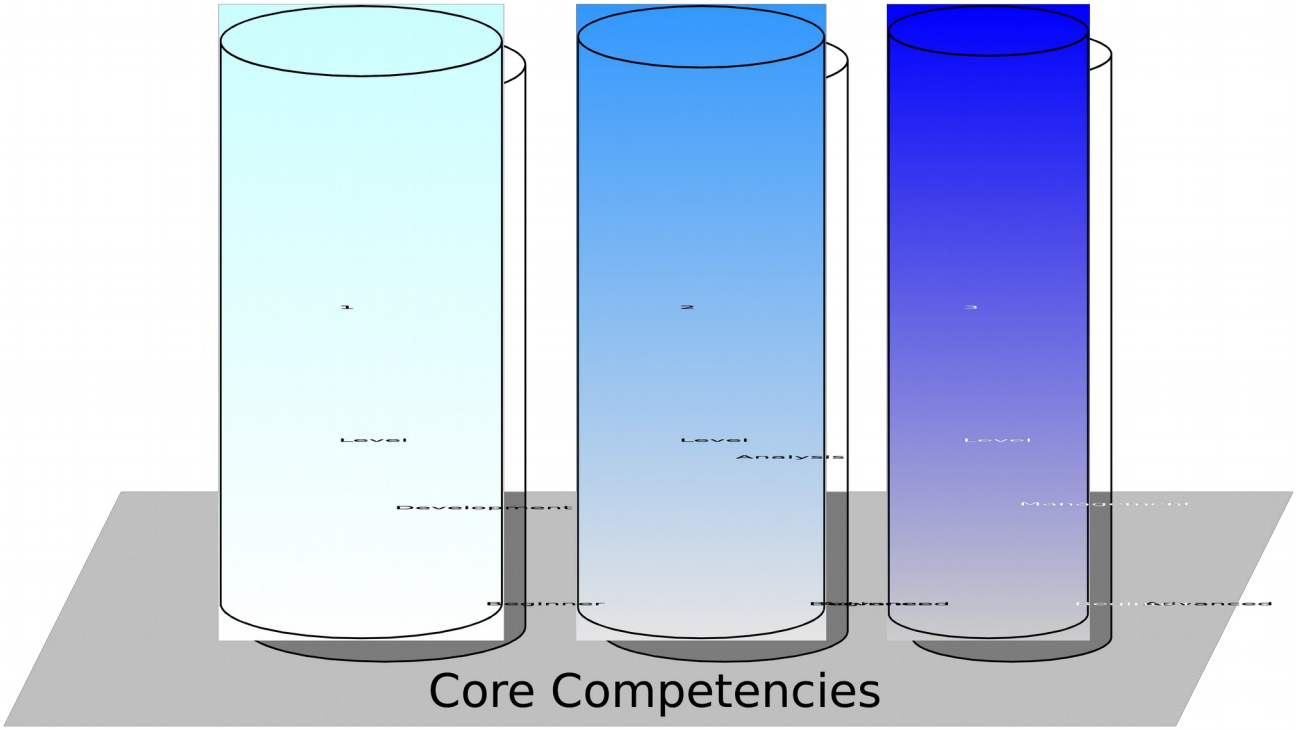
- **Level 3 Management**

  Primary function is to lead and manage an architecture effort through its entire lifecycle, from development to execution/implementation

- **White paper identifies the functions and associated KSAs for each level**

CIO/NII Enabling Net-Centric Operations

DOD Architect Core Competencies



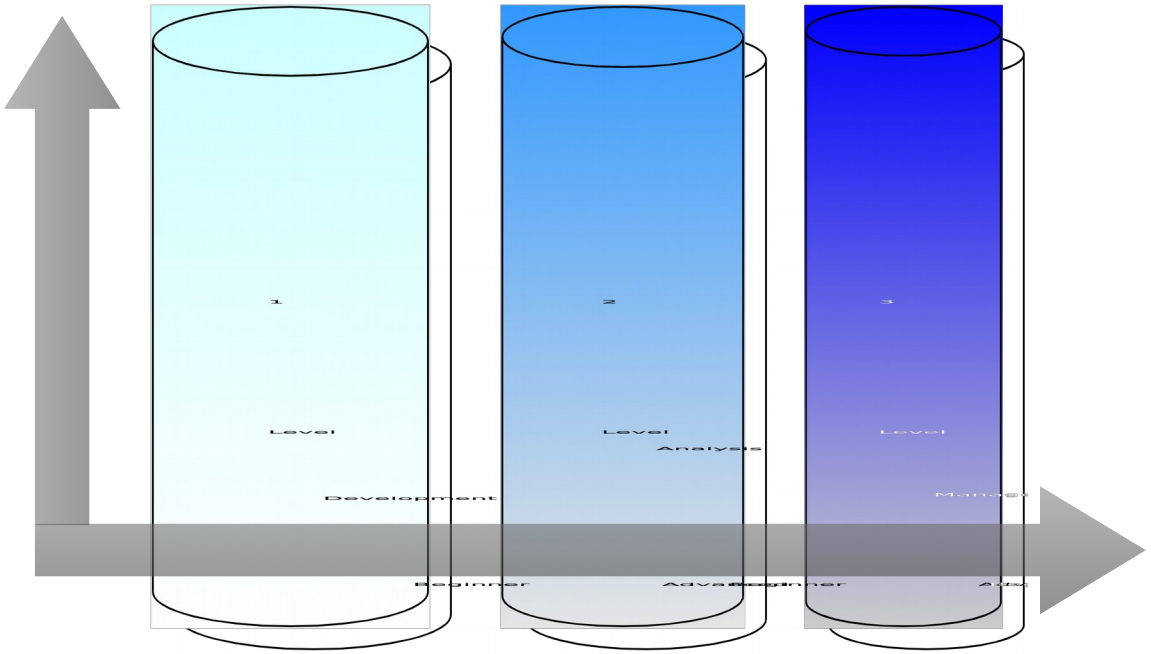
- **Core Competencies**
  - The core KSAs represent the fundamental competencies of an Architect, regardless of level.
  - Depth and breadth of each competency, however, depend on level

DOD Architect Core KSAs

Knowledge	Skills	Abilities
A body of information applied directly to the performance of a function.	**An observable competence to perform a learned psychomotor act.**	**Competence to perform an observable behavior or a behavior that results in an observable product.**
Architecture development **Architecture analysis** **Vertical area of knowledge** **Business processes** **Information technology**	**Modeling techniques** **Application of frameworks** **Application of tools** **Requirements gathering** **Analysis techniques**	**Communication (verbal/written/presentation)** **Abstract analytical thinking** **Quickly grasp concepts** **Teamwork** **Innovative**

- **Core KSAs**
  - As the framework matures, these core competencies will be further refined, to include definitions and examples

Transition Within and Between Levels



- **Transition**
  - Transitioning within a specific level is an informal transition between beginner and intermediate or between intermediate and advanced
  - Transitioning between levels varies depending on individual ability, however, prior to entering the next level, individuals should be functioning as an intermediate practitioner at their current level

Stratification of Levels

Stratification Focus Area	Level 1 Development	Level 2 Analysis	Level 3 Management
Data/Information	Data modeling Relational database systems Object-oriented, service-oriented, modular open system concepts	Data strategy Data warehousing Information flow analysis	Data management Information sharing environment Information systems
Systems	Modeling and simulation Network operations Systems engineering	Integration and interoperability solutions Open standards System to business mapping analysis	Acquisition and resourcing Information technology Compliance policies
Business	Process modeling Business modeling language Business rules	Process improvement techniques and analysis Concepts of operation Requirements analysis	Business mission and vision Measures of effectiveness Business cost analysis
Enterprise	Federation Enterprise architecture terminology Integration specialist	Guidance and policy (e.g., OMB's FEA) Performance analysis Decision process analysis	Enterprise transformation Enterprise strategy and goals Enterprise IT and business process management solutions

- **Focus Areas**
  - Data/Information, Systems, Business, Enterprise
  - Additional effort is necessary to refine this portion of the framework

Institutionalizing the Framework

- **Certification and Accreditation**
  - Individual organizations, academic institutions, and private industries will be encouraged to develop certification programs against the final DOD Architect Competency Framework
  - All certification programs based on the Competency Framework will be accredited by a third party organization representing the interests of the DOD

U.S. OFFICE OF PERSONNEL MANAGEMENT
Ensuring the Federal Government has an effective civilian workforce

- **OPM - Office of Personnel Mngt**

Develop an architecture job series or parenthetical

- **Military Departments**

Develop a Military Occupational Specialty around architecture

GSA U.S. General Services Administration

- **General Services Administration**

Develop a contractual standard for architecture clauses

CIO/NII Enabling Net-Centric Operations

CIO/NII
Enabling Net-Centric Operations

White Paper

- **Formalize a Competency Framework for the DoD Architect**
- **Provide a centralized web-based site that provides visibility into existing architecture education and training opportunities**
- **Identify an approach to assess the competency baseline of the current architecture workforce**
- **Take appropriate steps to institutionalize the Competency Framework**
- **Encourage academic institutions to develop training targeted toward senior leadership and architecture users**
- **Encourage academic institutions to develop certification programs based on the Competency Framework**

D0D Architecture Education Current Status

- **COMPLETE**
  - **DOD Architecture Training Workshop (I, II, III, IV)**
  - **White Paper – Available for Download**
  - **Industry Town Hall Meeting**
  - **OMB Meeting**
  - **Tutorial session (FEAC and NDU)**
- **IN PROGRESS**
  - **EA Conference Materials Is available**
    - **http://www.afei.org/brochure/8a05/index.cfm**
    - **DoD Architecture Education and Training**
      - **https://www.us.army.mil/suite/page/530507**
    - **Define problem with OPM Series**
    - **Define a Career path for Architects**
    - **Build a comprehensive DoDAF Course**

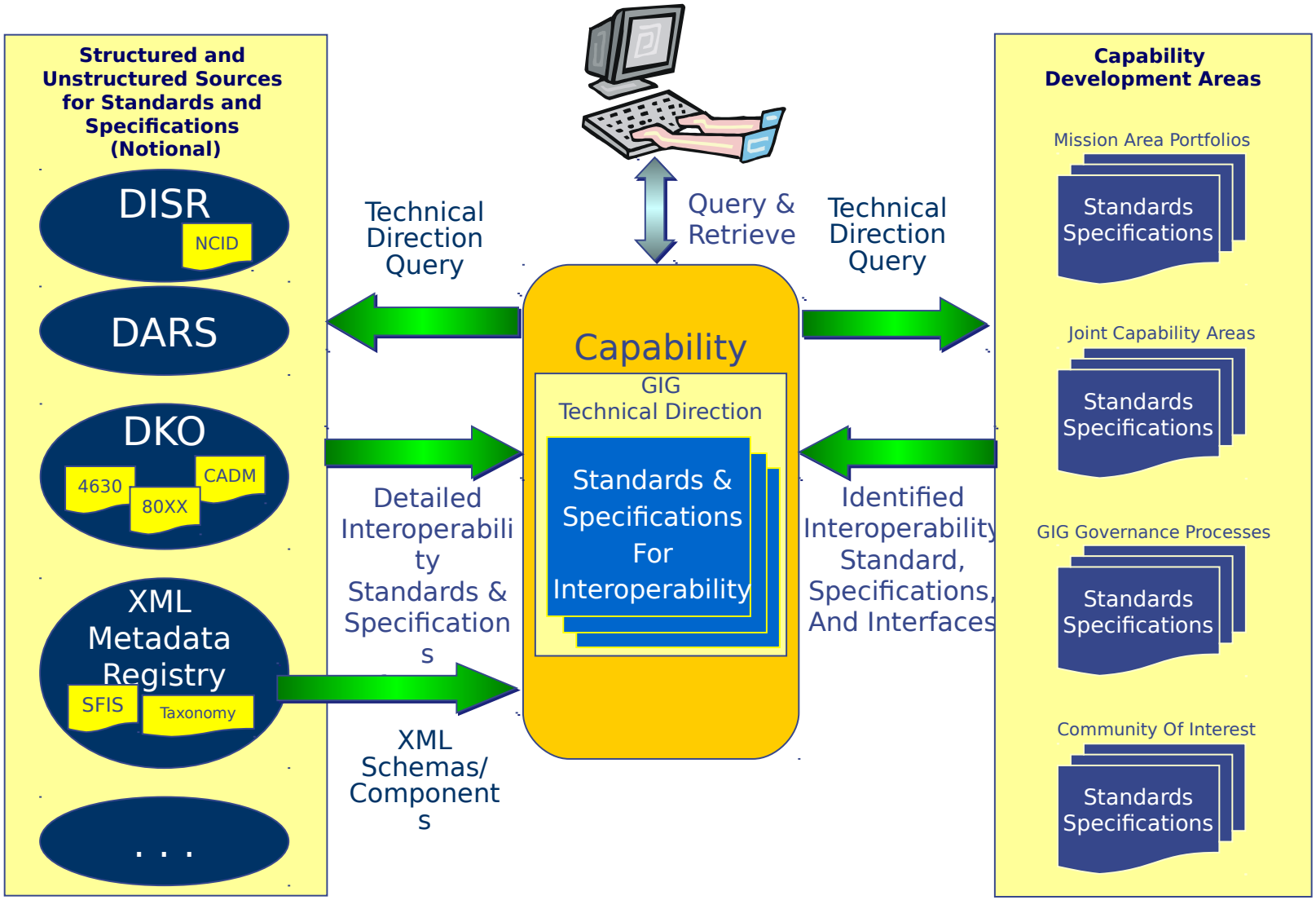
CIO/NII
Enabling Net-Centric Operations

CIO/NII
Enabling Net-Centric Operations

DoD GIG Technical Direction (GTD)

Walt Okon

DoD Technical Direction : High-Level Operational Concept



CIO/NII Enabling Net-Centric Operations

CIO/NII
Enabling Net-Centric Operations

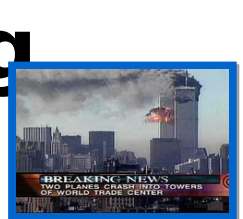
DoD Information Sharing Environment

Walt Okon

Chief Architect, DoD Information Sharing Architecture & Interoperability Directorate
Office of the DoD CIO/ASD NII

28 July 2008

Complexities of Information Sharing



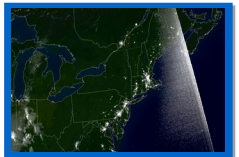
Terrorist Actions

Counter Terrorism

Warfighter Operations

Humanitarian Operations

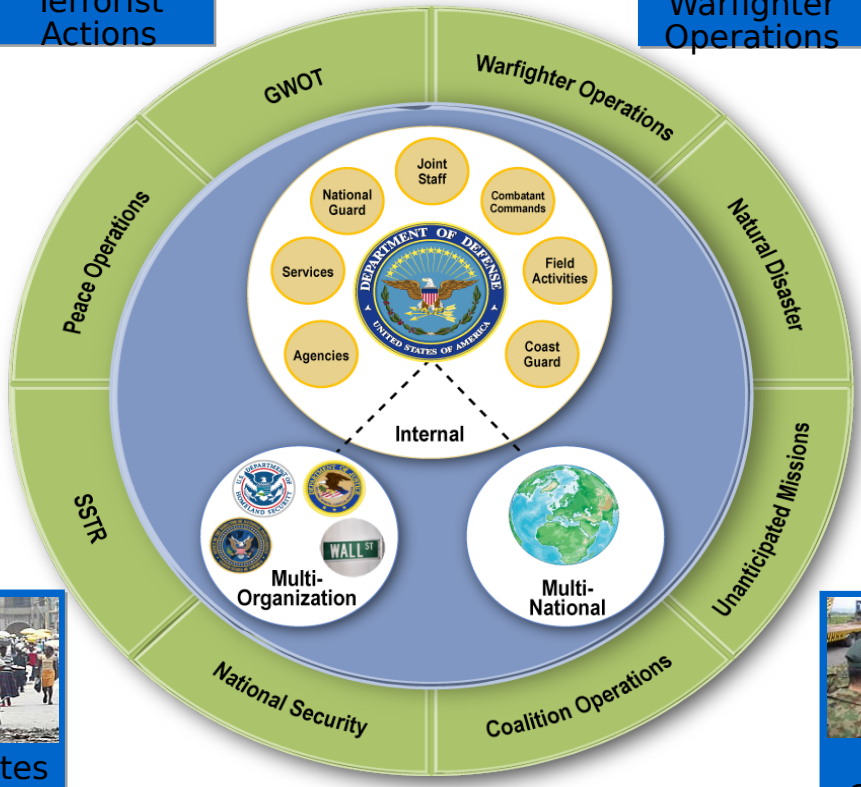
Natural Disasters


Northeast Power Blackout

Pandemic Flu

Failed States (Haiti)

Coalition Operations



DoD is part of this complex, extended information sharing enterprise…

CIO/NII Enabling Net-Centric Operations

CIO/NII
Enabling Net-Centric Operations

DoD Information Sharing Environment

Description:

- **Provide a DoD Information Sharing architecture and standards capability which will support cross-community, institutional approach to the sharing of information within DoD and across Federal Departments, state, and local governments.**
- **Provide architecture and engineering guidance to DoD Information Sharing Executive.**
- **Provide PM-ISE architecture and standard guidance to enable cross-community sharing for identifying, planning, installing, and operating capabilities that will become the ISE**

CIO/NII
Enabling Net-Centric Operations

DoD Information Sharing Environment

- **Major FY08 Tasks:**

  –Chief Architect, DoD Information Sharing.

  –Represent DoD on PM-ISE Chief Architect Roundtable and the CTISS Committee.

  –Design and deliver a CTISS Federated Standards Registry pilot.

  –Develop a DoD ISE Shared Space use case and concept capabilities with Net-Centric direction.

  –Partner with other ISE architects in the Federal Departments.

  –Partnership with DISA on analysis and engineering.

PM-ISE Information Sharing On-Going Pilot/Evaluations

- **Suspicious Activity Reporting (SAR) Pilot/Evaluation**
  - Sharing SAR with Federal Department, State and Locals
  - Connecting DoD Commands with Fusion Centers post-TALON Options
  - Pilot team: DoD, PM ISE, DOJ, and DHS
    - Conduct with State/Local Fusion Centers & Military Installations
- **Federated Standards Registry (CTISR)**
  - Sharing validated and approved Standards
    - Functional Standards – Directives, Instructions, Architectures
    - Technical Standards - Specifications
  - Connecting all Departments, States, Local and Tribal to one Standards source
  - Pilot Team: DoD, PM-ISE, and DOJ
    - CTISR Setup in December 2007; Functional Testing ongoing

CIO/NII Enabling Net-Centric Operations

CIO/NII
Enabling Net-Centric Operations

Bring It All Together

DoD Enterprise Architecture Conference 2009

CIO/NII
Enabling Net-Centric Operations

DoD Enterprise Architecture Conference 2009

- DoD Enterprise Architecture Conference
  - All DoD Architecture Professionals
  - Only official Architecture Conference
  - Enterprise Architecture & Standards
  - Deliver Interoperability
- 14 -18 April 2008 Last Conference Briefings
  - http://www.afei.org/brochure/8a05/index.cfm
- 20-24 April 2009 DoD Enterprise Architecture Conference - Deliverables

CIO/NII
Enabling Net-Centric Operations

Questions/Wrap-Up

Walt Okon

Chief Architect, DoD Information Sharing Enterprise Architecture & Standards Directorate
Office of the DoD CIO/ASD NII

28 July 2008

walt.okon@osd.mil
703-607-0502